DOCUMENT RESUME

ED 099 062 JC 750 001

TITLE	Progress and Prospect: A Study of the Kansas City Metropolitan Junior College District; Report to the Board of Trustees.
INSTITUTION	Little (Arthur D.), Inc., Cambridge, Mass.
SPONS AGENCY	Metropolitan Junior Coll. District, Kansas City, Mo.
PUB DATE	Jun 73
NOTE	277p.
EDRS PRICE	MF-$0.75 HC-$13.80 PLUS POSTAGE
DESCRIPTORS	*Community Surveys; Economic Climate; Educational Demand; *Educational Planning; *Enrollment Trends; *Junior Colleges; *Manpower Needs; School Community Relationship; Student Characteristics; Student Costs; Student Opinion
IDENTIFIERS	Kansas City; Kansas City Metropolitan Junior College District; *Missouri

ABSTRACT

The Board of Trustees of the Kansas City Metropolitan Junior College District sponsored a long range planning study for the future development of the district. Under the direction of Dr. Raymond J. Young, this study was designed to update an earlier one completed in 1968 by the staff in the light of changed conditions and trends. Information was obtained on the economic and sociological characteristics of the area in order to examine the validity of earlier forecasts of manpower requirements, population, and enrollments, and to enable future projections which have taken into account developing trends. Information relative to the need for community college educational programs and services was obtained from numerous sources including employers and other residents in the Kansas City Metropolitan area and the junior college district, college officials and students, high school students, official records and documents, regional planning agencies, and the U.S. Bureau of the Census. (Author/MJK)

ED 099062

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRO
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

PROGRESS AND PROSPECT:

A STUDY OF THE KANSAS CITY METROPOLITAN JUNIOR COLLEGE DISTRICT

Report to

the

Board of Trustees

Kansas City Metropolitan Junior College District

Kansas City, Missouri

75141

June, 1973

by

Arthur D. Little, Inc.

JC 750 001

PREFACE

Arthur D. Little, Inc. was invited by the Board of Trustees of the Kansas City Metropolitan Junior College District to undertake a long range planning study for the future development of the District. This study was designed to update an earlier one completed in 1968 by our staff in the light of changed conditions and trends. Information was obtained on the economic and sociological characteristics of the area in order to examine the validity of earlier forecasts of manpower requirements, population, and enrollments, and to enable future projections which have taken into account developing trends.

Information relative to the need for community college educational programs and services was obtained from numerous sources including employers and other residents in the Kansas City Metropolitan area and the Junior College District, college officials and students, high school students, official records and documents, regional planning agencies, and the United States Bureau of the Census. The purpose was to provide guidelines for future development of the District.

ACKNOWLEDGEMENTS

The Arthur D. Little, Inc. study team acknowledges with deep appreciation and gratitude the cooperation and valuable assistance we received from many persons in Kansas City, Missouri during the progress of this study. We especially appreciate the cooperation of Metropolitan Junior College District officials including Dr. Leslie Koltai, Chancellor when the study began and Mr. Robert Hankins, Acting Chancellor during the progress of the study. We received assistance and cooperation from other members of the District office, presidents of Penn Valley, Maple Woods, and Longview Colleges, and members of each college staff, especially the Deans of Student Affairs and Deans of Academic Affairs.

We recognize with special appreciation the invaluable assistance and cooperative efforts of Dr. Richard L. Alfred, Assistant Director of Educational Development and Research, who served as our primary working link with the Metropolitan Junior College District. It was through his office, with the additional help of his staff Mr. Ralph Lynch and Ms. Fran Ward, that all field contacts and arrangements were made for implementing the various study activities.

We acknowledge with appreciation the contributions of members on the study Advisory Committee who reviewed plans for the study and gave valuable ideas as the study progressed. Members were:

Mr. Richard Davis	Mid-America Regional Council
Ms. Bertha Holiday	Model Cities
Mr. Reed Kenagy	Board of Trustees, MJCD
Dr. Leslie Koltai	Metropolitan Junior College District Office
Mr. Robert Hankins	Metropolitan Junior College District Office
Dr. Richard Alfred	Metropolitan Junior College District Office
Mr. William Hatley	President, Longview College
Dr. John Gazda	President, Maple Woods College
Dr. Thomas Law	President, Penn Valley College

*In the absence of Dr. Koltai while the study was underway Dr. Howard Sims served as a member of the Committee.

We are grateful for the time devoted by executives of business, industry, and government and service agencies and various community residents in providing information to the study. To the many community college and high school students who provided information to the study and to those persons in the colleges and high schools who made their contributions possible we owe a debt of gratitude. Special gratitude and appreciation are expressed to those staff members of the Mid-America Regional Council (MARC) who made available demographic data of most recent date relevant to the study.

This project was carried out under the direction of Dr. Raymond J. Young with important assistance from Dr. Charles Halbower and Mr. Gerald Johnson. A consultant to the study was Dr. Norman Harris, Professor and Coordinator of Community College Development, Center for the Study of Higher Education, The University of Michigan, Ann Arbor, Michigan who contributed an analysis of educational program needs with emphasis on the occupational curriculum demands. Appreciation is expressed to Mr. Norman Law who developed the study report cover. No expression of appreciation is enough for the valuable assistance rendered by Ms. Geraldine Cox for secretarial services in preparing the report in its present form.

TABLE OF CONTENTS

Chapter | Page

I SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS 1

Introduction 1
Summary 1
1. Population Trends and Projections 1
2. Economic and Manpower Trends 3
3. Sociological Characteristics 5
4. Plans of Youth for Further Education 7
5. Factors Related to College Attendance or Non-Attendance 10
6. Image of Youth about MJCD Colleges 12
7. Information Relative to College Offerings 14
8. College Community Relationships 20
9. Community College Enrollment Status and Projections 21
10. Status of Metropolitan Junior College District Development 25
11. Comparison of Development and Previous Recommendations 28
Conclusions 30
Recommendations 40
1. The District and its Governance 40
2. Curriculum Development 41
3. Student Personnel Services 45
4. Community Educational Services 46
5. Evaluation 47
6. Access to College Services 47
7. Finance 47
8. Physical Facility Development 48
9. College - Community Relationships 50

II POPULATION, ECONOMIC, AND MANPOWER REQUIREMENT TRENDS 51

PART I - Population Trends 51

Introduction 51
Population Growth Trends 51
Population in the Metropolitan Junior College District 55
Population Distribution 55
Projections of Total Kansas City Metropolitan Area Population 57
Projected Population Distribution and Age Composition 61
Sociological Characteristics of the Population 63

TABLE OF CONTENTS

Chapter Page

II PART II - Economic Growth Trends 67

- Introduction 67
- Trends in Industrial Mix 67
- Structural Shift Trends in Employment 69
- Projections of Employment in Nonagricultural Industries 70
- Unemployment 72
- Other Economic Indicators 73

PART III - Manpower Requirements 74

- Introduction 74
- Occupational Structure of the Employed Population 75
- Labor Force Projections by Occupational Classification 79

III PAST AND PROJECTED ENROLLMENTS 81

- Introduction 81
- Comparison of Actual and Projected Enrollments 81
- Recent Enrollments in MJCD Colleges 82
- Methodology for Projecting Enrollments 87
- High School Enrollment Forecasts 87
- Community College Enrollment Prospects 89
- Peak Enrollment Potential 93
- Comparison of Enrollment Forecasts 94

IV STATUS OF THE METROPOLITAN JUNIOR COLLEGE DISTRICT 95

- Introduction 95
- Philosophical Foundations 95
- Organization and Staffing 96
- Curriculum 103
- Community Services 108
  1. Community Services in the MJCD 108
  2. Community Services 110
  3. Nature of Community Services 113
  4. Rationale for Community Services Program Development 114
- Student Personnel Services 118
  1. Introduction to Data on Status of Student Personnel Services 118
  2. Status of Orientation Activities 125
  3. Status of Admission and Registration Activities 127

TABLE OF CONTENTS

Chapter Page

IV
4. Status of Records 128
5. Status of Financial Services 128
6. Status of Food Services 129
7. Status of Health Services 130
8. Status of Foreign Student Services 130
9. Status of Testing Services 131
10. Status of Academic Advisement Services 131
11. Status of Counseling Services 132
12. Status of Personal Aid Services 132
13. Status of Student Activities 133
14. Status of Housing Services 133
15. Status of Placement Services 134
16. Status of Follow-up and Evaluation 134
Physical Facilities 135
Finance 137
1. Operation 137
2. Capital 141

V COMPARISON OF DEVELOPMENT AND PREVIOUS RECOMMENDATIONS 143

Introduction 143
Physical Facilities 143
Finance 144
Enrollments 145
Organization 146
Programs 146

VI MANPOWER NEEDS INDICATED BY LOCAL RESIDENTS AND CONDITIONS 153

Introduction 153

PART I - Manpower Needs Identified by Employers 154

Anticipated Need for Qualified Manpower 154
Conditions Relating to Employment of Technical and Semiprofessional Workers 158
Manpower Needs Discussed by Executives in the First Meeting 159
Manpower Needs Discussed by Executives in the Second Meeting 171
Summary of Discussions 185

TABLE OF CONTENTS

Chapter		Page
VI	PART II - Manpower Needs Identified from Other Local Sources	187
	Introduction	187
	Major Manpower Needs of the Civil Service Commission	187
	Private Trade and Vocational Schools	187
	Area Vocational Technical Schools	188
	PART III - Opinions About Metropolitan Junior College District Operation	189
	Introduction	189
	General Impressions	189
	Students	189
	Programs	190
	Facilities	190
	Factors Influencing Development of MJCD Colleges and Needed Improvements	191
	Public Satisfaction and Support	191
VII	A STUDY OF HIGH SCHOOL SENIORS	193
	Introduction	193
	Characteristics of Respondents	193
	Educational Plans of Seniors	196
	Plans for Next Year After Graduation	200
	Where Seniors Expect to Enroll	204
	Occupational Expectations of Seniors	206
	Seniors Who Do Not Plan on Further Education	208
	Reasons for Not Enrolling at a MJCD College	212
	Factors Related to Plans for Continuing Education	213
	Students' Perceptions About High School	217
VIII	STUDY OF COMMUNITY COLLEGE STUDENTS	223
	PART I - Information from Fall Registrations	223
	Characteristics of Students	223
	How Students Get to College	228
	Reasons for College Attendance	230
	Financial Circumstances	233
	Future Educational Plans of Students	236
	Comparison of Present Occupation and Career Goals	239
	PART II - Study of Selected Sampling of Students	241
	Introduction	241

TABLE OF CONTENTS

Chapter | Page

VIII Characteristics of Respondents 241
Student Plans for the Future 245
Factors Affecting Enrollments 248
Student Perceptions About Factors Related to Enrollments 251
Evaluation of Help Received From the College 257
Additional Programs of Interest 262
Sources of Information About MJCD 263

LIST OF TABLES

Table Number — Page

35 TYPES OF QUALIFIED MANPOWER NEEDED 155

36 PERCEIVED CLASS RANK BY HIGH SCHOOL CURRICULUM 194

37 STUDENT PERCEPTIONS OF FAMILY INCOME 196

38 PLANS OF SENIORS FOR CONTINUING THEIR EDUCATION 197

39 PLANS FOR FURTHER EDUCATION BY SEX 198

40 RELATIONSHIP OF HIGH SCHOOL PROGRAM AND PLANS FOR FURTHER EDUCATION 199

41 RELATIONSHIP OF PERCEIVED HIGH SCHOOL RANK AND PLANS TO CONTINUE EDUCATION 200

42 SENIORS' PLANS FOR YEAR FOLLOWING GRADUATION 200

43 RELATIONSHIP OF PERCEIVED CLASS RANK AND PLANS FOR NEXT YEAR 202

44 RELATIONSHIP OF SENIORS' PLANS FOR NEXT YEAR AND THEIR PLANS FOR CONTINUING EDUCATION 203

45 WHERE SENIORS EXPECT TO ATTEND COLLEGE 204

46 CHOICE OF EDUCATIONAL INSTITUTION BY PERCEIVED CLASS RANK 205

47 SENIORS' NEAR TERM AND FAR TERM CAREER ASPIRATIONS 207

48 FIELD IN WHICH SENIORS WANT TO CONTINUE EDUCATION BY NUMBER AND PERCENT 209

49 REASONS WHY SENIORS DO NOT PLAN ON MORE EDUCATION 210

50 EDUCATIONAL INTERESTS OF SENIORS WHOSE PLANS DO NOT INCLUDE CONTINUING IN SCHOOL 211

51 REASONS WHY SENIORS WOULD NOT ATTEND KCMJC 212

52 RELATIONSHIP BETWEEN PLANS OF SENIORS AND EXTENT TO WHICH RELATIVES ATTENDED COLLEGE 213

53 PARENTS EDUCATIONAL ATTAINMENT AND YOUTH PLANS FOR EDUCATION BY PERCENT 214

54 RELATIONSHIP BETWEEN YOUTH PLANS AND THEIR PERCEPTIONS OF THEIR PARENTS' ATTITUDES ABOUT CONTINUING IN SCHOOL 215

LIST OF TABLES

Table Number		Page
55	STUDENTS' PERCEPTIONS OF FAMILY FINANCIAL STATUS AND FUTURE EDUCATIONAL PLANS	216
56	SENIORS' PERCEPTION ABOUT AMOUNT OF HELP RECEIVED ON CAREER AND EDUCATIONAL PLANNING	217
57	SENIORS' PERCEPTIONS OF COUNSELING SERVICES AND PLANS TO CONTINUE EDUCATION	218
58	SENIORS' EVALUATION OF HIGH SCHOOL SERVICES AND FACILITIES BY REPORTED RANK IN CLASS	219
59	SENIORS' EVALUATION OF SERVICES AND FACILITIES AND PLANS ABOUT CONTINUING EDUCATION	221
60	PERCENT OF STUDENTS BY ETHNIC BACKGROUND	223
61	WHERE STUDENTS LIVED	224
62	ENROLLMENT STATUS	225
63	PERCENT OF PARENTS BY REPORTED LEVEL OF EDUCATIONAL ATTAINMENT	226
64	PARENTS' OCCUPATIONS BY PERCENT	227
65	PERCENT OF STUDENTS BY DISTANCE FROM HOME TO COLLEGE	228
66	PERCENT OF STUDENTS BY MODE OF TRANSPORTATION	229
67	MODE OF TRANSPORTATION TO COLLEGE BY DISTANCE OF HOUSE	230
68	PERCENT OF STUDENTS BY REASON FOR ATTENDING COLLEGE	231
69	PERCENT OF STUDENTS BY REASON FOR SELECTING A COMMUNITY COLLEGE	232
70	PERCENT OF STUDENTS ACCORDING TO ORDER OF CHOICE FOR MJCD	233
71	PERCENT OF STUDENTS BY FINANCIAL STATUS	234
72	INCOME LEVELS OF DEPENDENT'S PARENTS AND OF INDEPENDENT STUDENTS	234
73	PERCENT OF STUDENTS BY WORK EXPECTATION	235

LIST OF TABLES

Table Number — Page

74 PERCENT OF STUDENTS WITH AMOUNT OF COLLEGE EXPENSES CONTRIBUTED BY OTHERS 236

75 CAMPUS WHERE STUDENTS PLAN TO ATTEND NEXT SEMESTER 237

76 PLACES TO WHICH STUDENTS PLAN TO TRANSFER 237

77 HIGHEST DEGREE SOUGHT BY PERCENT OF STUDENTS 238

78 PRESENT OCCUPATION AND CAREER GOAL COMPARED BY PERCENT OF COLLEGE STUDENTS 240

79 NUMBER AND PERCENT OF RESPONDENTS BY SEX, COLLEGE AND COLLEGE CLASSIFICATION 242

80 PERCENT OF STUDENTS BY AGE, SEX AND COLLEGE 242

81 PERCENT OF COMMUNITY COLLEGE STUDENTS BY HIGH SCHOOL ACADEMIC RANK REPORTED BY THEM 243

82 REPORTED HIGH SCHOOL ACADEMIC RANK BY COLLEGE CLASS LEVEL 244

83 PERCENT OF STUDENTS ENROLLED PART OR FULL-TIME 244

84 LOCATION OF HIGH SCHOOL FROM WHICH STUDENTS GRADUATED BY PERCENT 245

85 PERCENT OF STUDENTS PLANNING TO EARN A DEGREE 245

86 PERCENT OF STUDENTS BY REPORTED HIGH SCHOOL ACADEMIC RANK AND PLAN FOR COMPLETING A DEGREE 246

87 PERCENT OF COLLEGE STUDENTS BY FUTURE PLAN 247

88 PERCENT OF STUDENTS BY FUTURE PLAN AND REPORTED HIGH SCHOOL ACADEMIC RANK 248

89 PERCENT OF STUDENTS WHO WOULD ENROLL AGAIN 249

90 PERCENT OF STUDENTS WHO WOULD ENROLL AGAIN AT MJCD BY REPORTED HIGH SCHOOL ACADEMIC RANK 249

91 PERCENT OF STUDENTS BY REASON FOR ENROLLING 250

92 PERCENT OF COLLEGE STUDENTS BY REPORTED HIGH SCHOOL ACADEMIC RANK AND REASON FOR ENROLLING 251

LIST OF TABLES

Table Number		Page
93	KINDS OF STUDENTS THOUGHT TO ENROLL AT MJCD BY PERCENT	252
94	COLLEGE STUDENTS' PERCEPTION OF TYPES OF PERSONS ENROLLING AT MJCD COLLEGES ACCORDING TO REPORTED HIGH SCHOOL ACADEMIC RANK	253
95	PERCENT OF STUDENTS ACCORDING TO IMPORTANCE OF REASONS WHY OTHERS DID NOT ATTEND AN MJCD COLLEGE	254
96	IMPORTANCE OF REASONS FOR NON-ATTENDANCE BY REPORTED HIGH SCHOOL ACADEMIC RANK AND SEX OF COLLEGE STUDENTS BY PERCENT OF RESPONSE	256
97	IMPORTANCE OF REASONS FOR NON-ATTENDANCE GIVEN BY ALL RESPONDENTS	257
98	PERCENT BY COLLEGE ACCORDING TO HOW WELL STUDENTS BELIEVE COLLEGE IS PREPARING THEM	258
99	HOW WELL STUDENTS BELIEVE COLLEGE IS PREPARING THEM	259
100	PERCENT OF STUDENTS BY USE AND AMOUNT OF HELP RECEIVED FROM SELECTED COLLEGE PROGRAMS AND SERVICES	260
101	PERCENT OF STUDENTS BY INTEREST IN A FIELD OF STUDY NOT OFFERED	264
102	PERCENT OF STUDENTS BY SOURCE OF INFORMATION ABOUT MJCD	263

LIST OF FIGURES

Figure Number		Page
1	POPULATION OF THE KANSAS CITY STANDARD METROPOLITAN STATISTICAL AREA 1960 AND 1970	54
2	POPULATION DISTRIBUTION 1970	58
3	POPULATION DISTRIBUTION 1990	59
4	METROPOLITAN JUNIOR COLLEGE DISTRICT ORGANIZATIONAL CHART, 1972-73	98
5	DISTRICT LEVEL FUNCTIONAL ORGANIZATION CHART, 1972-73	99
6	LOCATION OF COLLEGES	136

CHAPTER I

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Presented in Chapter I is a summary of major findings from the study. Conclusions based upon the findings are presented as are the recommendations for further district growth and development. In Chapter II the reader will find information on the population, economic and manpower requirement trends in the Kansas City Standard Metropolitan Statistical Area. Projected enrollments for the Metropolitan Junior College District Colleges are presented in Chapter III. Information on the status of the Metropolitan Junior College District development is found in Chapter IV. To be found in Chapter V is a comparison of status of development and guidelines for development recommended in 1968 by Arthur D. Little, Inc. Chapter VI contains data on manpower needs indicated by local residents and conditions. Information obtained from high school seniors on occupational aspirations, educational intentions, and factors associated with education beyond high school are presented in Chapter VII. Information from studies of Metropolitan Junior College District students is found in Chapter VIII.

Summary

1. Population Trends and Projections

1. Total population in the Kansas City Standard Metropolitan Statistical Area (SMSA) -- Johnson and Wyandotte Counties in Kansas and Jackson, Clay, Platte, and Clay Counties in Missouri -- increased by a larger percentage during the 1940's and 1950's than it did during the 1960's.

2. The proportion which total population in the four-county Missouri portion of the Kansas City SMSA was to total population in the entire Kansas City SMSA declined from about three-fourths in 1940 to slightly over two-thirds in 1970. Over the past three decades total population in the four-county area of Missouri increased 57.3 percent, while total population in the entire Kansas City SMSA increased 74.5 percent.

3. Rate of population growth in the Kansas City SMSA was over three times as high as rate of population growth in the State of Missouri during the 1950's, but during the 1960's the rate of population growth in the Kansas City SMSA slowed to just under twice the rate of population growth in the entire state. Rate of population growth in the Missouri portion of the Kansas City SMSA decreased from 23 percent in the 1950's to 11.6 percent during the 1960's.

4. The proportion which non-white population in the four-county Missouri portion of the Kansas City SMSA was of non-white population in the entire Kansas City SMSA increased from about two-thirds in 1950 to three-fourths in 1970. While total population in the four-county Missouri area increased 11.6 percent during the 1960's, the percentage increase of non-white population in this area was 37.5 percent for that decade.

5. The largest percentage increases of total population in the four-county Missouri area over the past decade by order of magnitude occurred in Clay, Platte, Cass, and Jackson Counties. Except for Platte County in which there was a small percentage decline, the non-white population percentage increases by order of magnitude were in Cass, Clay, and Jackson Counties.

6. Total population in the Metropolitan Junior College District was 77 percent of the total population in the four-county portion of the Kansas City SMSA in 1970. Approximately 56 percent of the MJCD population resided in the Kansas City, Missouri public school district, 13 percent resided in the North Kansas City school district, and 31 percent resided in the remaining six public school districts.

7. There was a marked decline between 1960 and 1970 in the number of persons age five and under both in Missouri and in the Kansas City SMSA, but the number of persons age 10-29 was considerably larger in 1970 than in 1960 for the SMSA. Kindergarten enrollments decreased in the 1971 fiscal year in Jackson, Cass, and Clay Counties, but in Platte County there was a 2.3 percentage increase.

8. The largest percentage increases in total population over the 1960 decade were in the Townships of Raymore, West Peculiar, Big Creek and Mount Pleasant in Cass County; Washington, Liberty, Platte, and Kearney in Clay County; Washington, Brooking and Blue in Jackson County; and, May, Pettis and Carroll in Platte County.

9. Although the rate of general in-migration and population growth in the Kansas City Metropolitan Area are not expected to accelerate until around the end of the 1970 decade, apartment construction along major arterial streets and urban highways is expected to result in continued growth. The most rapid development is expected to be induced in Clay and Platte Counties by presence of the Kansas City International Airport. Population growth is expected throughout the entire suburban area with heaviest concentrations to the north and southeast.

10. Total population within the Kansas City SMSA is expected to approximate 1,388,900 in 1975 and 1,445,800 in 1980, with approximately 743,000 persons residing in the MJCD by 1980.

11. Trends derived from population projections to the year 2,000 in the Kansas City Metropolitan Region indicate that population in Cass, Clay, Jackson, and Platte Counties is expected to continue a decline as a proportion of total population, although increases in absolute numbers are expected in each county. Approximate percentage increases in population expected between the years 1970 and 2000 in each of the four counties are: Platte (222 percent), Clay (126 percent), Cass (94 percent), and Jackson (20 percent).

12. While persons age 19 and under are expected to constitute a declining proportion of total population in the Metropolitan Region, growth in absolute numbers is expected to exceed a third. Largest percentages of increase between the years 1970 and 1980 and 1970 and 2000 in absolute numbers of persons under age 60 and as a portion of total population are expected in the 20-29 and 30-39 age groups.

13. While the rate of population growth in the Metropolitan Junior College District Areas served primarily by Maple Woods and Longview Colleges is expected to be about the same between the years 1970 and 2000, the total numbers of persons residing in the area served by Longview College is expected to be greater.

2. Economic and Manpower Trends

1. Trends in the nonagricultural industrial structure of the economy deviated most from the 1975 year projections made in 1967-1968 by Arthur D. Little, Inc. (ADL) in the manufacturing wholesale and retail trade, and contract construction classifications. National Planning Association (NPA) projections made in 1967 for the year 1975 deviate most in the government, contract construction, and wholesale and retail sectors. The gradual decline from 1958 to 1967 in the wholesale and retail sector of the economy has been reversed since then, so the proportion of total nonagricultural employment in this sector was higher in 1973 than projected in 1967-1968. Employment in the contract construction sector has been less than earlier projected. Manufacturing employment has been considerably below that projected by ADL and the projection by NPA for employment in the government sector was considerably below the employment that has materialized.

2. Broad structural shifts in the area's economy appear at the time of this study to include a proportional increase in the service industries and government sectors, a slow continued decline of manufacturing in general, particularly in the nondurable goods industries as a proportion of the labor force employed, and a proportional increase in the wholesale and retail sector of the economy. Decreases are expected to continue in the mining and agricultural industries. The short term decline in contract construction is expected to reverse and increase gradually. Although the number of persons employed is expected to increase gradually in the finance, real estate and insurance sector and in the transportation and utilities sector, a small proportional decline is expected in these sectors as part of the total economy.

3. Over the past decade, the largest percentage increase in the occupational structure of the labor force was in the professional, technical, and kindred occupations. The largest numbers of employed persons are in the occupational classifications of clerical and kindred (22 percent), operatives and kindred (15 percent), professional, technical, and kindred (15 percent), and craftsmen, foremen, and kindred (14 percent). Twelve percent are service workers.

4. The 1970 occupational distribution structure was close to the one projected in 1967-1968 by Arthur D. Little, Inc. for 1975. The largest deviation was that the proportion of laborers was greater than forecast and the proportion of operatives and kindred workers forecast was above the proportion existing in 1970. Relatively small differences existed in other occupational classifications.

5. It is expected that considerably above average growth will occur during this decade in the proportion of professional, technical, and kindred workers and in the service classifications. Above average growth rates are expected to exist for nonfarm managers, officials and proprietors and for clerical and kindred workers. Below average growth is expected in the proportion of craftsmen, foremen, and kindred workers.

6. Between 1970 and 1980, if expected trends continue, approximately 118,000 additional persons will be required in the Missouri portion of the Kansas City SMSA, exclusive of replacement requirements.

3. Sociological Characteristics

A. Kansas City Metropolitan Area

1. A higher percentage of residents age 5 years and over in the Missouri portion of the Kansas City SMSA than in the nation were living in the same county in 1970 as they did in 1965. In the four-county Missouri portion of the SMSA, 71 percent of the workers worked in the same county where they lived compared to 45 percent of the workers residing in the Kansas portion of the SMSA.

2. The percentage of the total population in the Missouri portion of the Kansas City SMSA attending college, the number of persons in college per 1000 population, and the percentage of persons age 25 and over with four or more years of college are less than the percentages for total population in the nation. The median number of school years completed by men and women residing in the four-county Missouri area is slightly above the median number in the nation. A higher percentage of men and women residents over age 25 in the four-county area have completed 1-3 years of college than was true in the nation as a whole.

3. The median and mean family income, the mean income per family member and the mean and median income per unrelated individual for residents of the four-county Missouri portion of the Kansas City SMSA were less than for the total Kansas City SMSA but higher than for the nation as a whole. A higher percentage of residents in the four-county Missouri portion of the Kansas City SMSA than in the total SMSA had salaries below the poverty level and were receiving public assistance, but the percentages were less than those reported for the nation as a whole.

4. The cost of living in the Kansas City Metropolitan Region and the average annual growth rate in family living costs were below the median compared to other metropolitan regions and Standard Metropolitan Statistical Areas.

B. High School and Community College Students

5. Nearly two-thirds of the 5,687 high school seniors responding to the study held part-time jobs while attending high school. Thirteen percent of the seniors thought their family income provided necessities but not many luxuries, and 9 percent indicated the family sometimes had difficulty getting the necessities or that they frequently had difficulty making ends meet.

6. Twenty-seven percent of 5,687 high school seniors responding to the study were from broken homes.

7. Slightly over a fifth of the high school seniors responding to the study indicated their parents had less than a high school education, and 6 percent of both parents were reported to have attended a business or trade school. Nearly a fifth of the fathers and a tenth of the mothers were reported by seniors to have had a college education. Others had a high school education.

8. Data obtained in the Fall, 1972, from 8,928 community college students in the Metropolitan Junior College District indicate that 19 percent were non-Caucasian/white by ethnic background. At Longview and Maple Woods Community College, 2.3 percent of the students were non-Caucasian/white, while at Penn Valley Community College they constituted 36 percent of the enrollment.

9. A larger proportion of men than women community college students lived with their parents and the converse was true of students who lived in their own homes.

10. Higher percentages of students at Penn Valley Community College than those elsewhere indicated parents had less than a high school education. While higher percentages of mothers than fathers of students at each college were reported to be high school graduates, higher percentages of fathers than mothers were reported to have completed a college degree.

11. The largest percentage of community college students' fathers were reported to be semi-skilled workers, general laborers, and managers or executives. The largest percentage of students' mothers were reported to be housewives, saleswomen, clerical workers, semi-professional/technical workers, semi-skilled workers or general laborers. The largest percentage of students reporting parents as being engaged in professional work requiring a doctor's degree or advanced professional degree by order of frequency were enrolled at Penn Valley, Longview, and Maple Woods Community Colleges.

12. Higher percentages of students attending Longview Community College than students attending other community colleges report living further from the campus. Forty percent of all students reported living within five miles of the college they were attending and 35 percent reported living 6-10 miles away. Regardless of college attended most students (over 80 percent) drive their own car. Larger percentages of men than women ride a bus, participate in a car pool, or use some form of transportation other than driving their own car. Approximately a tenth of the students at Penn Valley Community College ride a bus, regardless of distance they live from campus.

13. About 57 percent of 8,928 community college students enrolled in the Fall 1972 reported they were financially independent of parents, and the largest percentage of financially independent students were at Penn Valley. The largest percentage of students partially dependent on parents were enrolled at Longview and the largest percentage wholly dependent on parents were enrolled at Maple Woods.

14. The largest percentages of financially independent community college students at a low income level were enrolled at Penn Valley, Longview, and Maple Woods in that order. The largest percentage of financially dependent students who reported parents' income as being over $9,000 per year were enrolled at Longview, Maple Woods, and Penn Valley in that order.

15. Eighty-one percent of all MJCD students enrolling in the Fall 1972 expected employment off campus; over one-half expected to work 33-40 hours per week while attending college. The largest percentage of men expecting to work off campus were at Maple Woods, Longview, and Penn Valley community colleges in that order; however, the largest percentage of women expecting to work off campus were enrolled at Penn Valley.

16. Eight percent of all MJCD students indicated they were applying for financial aid from MJCD. Percentages ranged from 5 percent at Longview to 10 percent at Penn Valley. About two-thirds of all men students and one-half the women students were receiving no financial assistance from others.

4. Plans of Youth for Further Education

A. High School Seniors

1. Although 73 percent of all senior boys and 71 percent of the girls indicated future plans would probably or definitely include continuing their education beyond high school graduation, the range in percentage of all seniors with such plans ranged from 25 percent in one high school to 63 percent in another. The range in percentage of seniors whose plans would not include further education was from 3 to 28 percent among the high schools.

2. While 72 percent of all seniors indicated future plans would definitely or probably include continuing their education, 68 percent expected to attend school the next year after high school graduation; 18 percent of them expected to attend a community college, and 14 percent expected to attend an occupationally related school such as a business college, nurses training school or a trade or technical school.

3. Although 18 percent of all seniors indicated they expected to attend a community college the year after high school graduation, 16 percent expected to attend an MJCD college. While 36 percent indicated they planned to attend a four-year college or university, 24 percent expected to enroll at the University of Missouri in Columbia or Kansas City or in Warrensburg State College or the Independence Branch. Thirteen percent expected to enroll in an occupationally oriented school or college and 7 percent planned to attend either the Kansas City Regional Vocational Technical Institute (1 percent) or a private trade or vocational school or college (6 percent).

4. Except for seniors who expect to enroll in a school or college outside the Kansas City area, the largest percentage of seniors in the top, middle, and bottom thirds of their class academically expect to attend an MJCD college.

5. About 95 percent of the seniors in the college preparatory curriculum indicated they would probably or definitely continue their education compared to slightly over two-thirds of the seniors in the general curriculum and about two-thirds in the business/commercial curriculum. Twenty-eight percent of all seniors were in a college preparatory curriculum, 34 percent were in a general curriculum, 19 percent were in a business/commercial curriculum, and the rest were distributed among other curricula.

6. The higher the reported class rank, the higher were the percentages of high school seniors who expected to attend school the next year following high school graduation. About 99 percent of the high school seniors who expected to attend a four-year college the next year after graduation had plans that probably or definitely included further education. Approximately 95 percent of the seniors who expected to attend a two-year college the next year after graduation indicated future plans would probably or definitely include further education. The largest percentage of seniors reported in the bottom third of their class academically as well as those whose future plans did not include further education expect to work on a job, travel and see some things, join the military services, or become a housewife.

B. Community College Students

7. Over half of the 8,928 community college students contacted (58 percent of the men and 42 percent of the women) expected to transfer to a four-year college or university. One-half of the students planning to transfer expect to enroll at the University of Missouri in Kansas City; others expect to enroll in a variety of other colleges after attending a MJCD college. Official college records show 61 percent of the students during the Spring 1973 enrolled in collegiate transfer programs.

8. Approximately a fourth of the MJCD men students and a third of the women students aspire to an associate degree. Sixty percent of the men and 43 percent of the women aspire to the bachelor's, master's and doctor's degrees. The highest percentages of all students aspiring for a master's or doctor's degree were enrolled at Penn Valley Community College.

9. Eighty-nine percent of all students enrolled during the Fall 1972 expected to enroll again for the Spring semester. The highest percentage expecting to enroll during the spring was at Maple Woods Community College, and the lowest percentage was enrolled at Longview Community College.

10. The largest percentage of the 8,928 students planning to move to another MJCD college planned to move from Penn Valley to Maple Woods and from Longview to Penn Valley. The largest percentage planning to move were men (0.6 percent). Movement from one college to another after initial enrollment appeared to involve relatively small numbers and percentages of students. Drawing power of students by one college from the primary service area of another for initial enrollment is much greater than the intercollege movement after initial enrollment.

11. Of the sample group of 691 MJCD students contacted 62 percent expected to earn a degree or certificate at the MJCD college where they were enrolled. A higher percentage (67 percent) of student respondents enrolled at Penn Valley Community College than at the other colleges (56 and 57 percent at Longview and Maple Woods, respectively) expected to earn an academic credential. A higher percentage of college students responding who reported being in the top third of their high school class than others did not expect to complete a credential at a MJCD college. These data reflect expectations of the more academically able students to transfer into a bachelor's degree-granting institution without completing requirements for a lower level credential. Larger percentages of full-time than part-time students expected to complete a credential program at an MJCD college.

12. Sixty-three percent of the sample group of 691 students contacted expect after completing the educational program at an MJCD college to transfer to a four-year college or university, and 3 percent expect to enter a trade or a technical school institute or college. A larger percentage of respondents enrolled at Penn Valley than at one of the other colleges expected to transfer to a four-year college and also to attend an institution offering a trade or technical program. Except for students reported to be in the bottom third of their high school class academically, a higher percentage of men than women expected to transfer elsewhere.

5. Factors Related to College Attendance or Non-Attendance

1. Higher percentages of high school seniors with plans for further education than other seniors lived with both parents, had friends and relatives who had continued in school after high school (including an MJCD college), had parents with higher levels of educational attainment and reported that parents expected or wanted them to continue in school.

2. Even though seniors' plans for further education were found to be positively related to their perceptions of family financial conditions, the financial status was not as closely related to plans as other factors.

3. Lack of transportation was cited by approximately 30 percent of the college students responding to the study at Maple Woods and a fourth of those at Penn Valley and Longview as having some or much importance as a reason why more of their friends and acquaintances did not attend an MJCD college. Approximately a fourth believed the desire for a better college was of "much" importance.

4. Approximately 40 percent of 691 college students queried about reasons why more persons they knew did not enroll at an MJCD college indicated lack of information was of some or much importance.

5. The largest percentage of the 8,928 MJCD students (44 percent) indicated the most important reason they were attending college was to secure skills necessary for job advancement or to prepare for entering an occupational field requiring technical skills and/or an associate degree. An additional 29 percent of all students were attending college because they want to enter a professional occupation requiring a baccalaureate or higher degree. A fifth (23 percent of the women and 18 percent of the men) indicated they desired a broader educational background.

6. Largest percentages of MJCD students reported they selected a community college because of low cost (36 percent), desire for a course or program of courses offered (sixteen percent), opportunity to continue working in their home town (14 percent), and it was possible to live at home (11 percent). Financial advantage and convenience were reasons cited by 61 percent of the students. Higher percentages of students at Longview and Maple Woods as compared to Penn Valley attended a community college so they could live at home and work in their home town. A larger percentage of students enrolled at Penn Valley than at the other colleges chose a community college because of low cost and to obtain a special course or program of courses. Slightly over three-fourths (76 percent) of all students indicated the college attended was their first choice. About 17 percent chose the community college as a second or third choice.

7. Desire to work and make money combined with the reason that they could not afford to continue their education because it is too expensive, constitute the reasons cited by the largest percentage of high school seniors as being of greatest importance for not planning on more education. The next important reason for boys is that they are tired of school, and for girls it is that they want to get married.

8. Eleven percent of the high school seniors indicated the program they wanted was not offered as the reason of greatest importance why they did not plan to enroll at an MJCD college. Nine percent indicated they did not have enough information about MJCD colleges. Eleven percent indicated the program they wanted was not offered.

9. The largest percentage of high school seniors without plans for continuing their education expressed interest in on-the-job training, apprenticeship and military service training. Thirteen percent of all seniors indicated they would definitely or maybe change plans to include more education if more money were available. When asked how much money they would need, 12 percent of all high school seniors indicated it would take enough to pay half or all the expenses.

6. Image of Youth about MJCD Colleges

1. When asked if they would enroll in an MJCD college if they were doing it over again, 88 percent of 691 college students (evenly divided among the three colleges) replied affirmatively. Six percent would not enroll if doing it over again, and 6 percent were uncertain. Slightly lower percentages of women who reported having been in the middle third of their high school class than other students responding would definitely enroll if doing it over.

2. Financial advantage and convenience were cited by 64 percent of the 691 students as reasons why they enrolled in an MJCD college, and 16 percent cited the reason that the courses they wanted were offered. The largest percentage of students citing low cost was at Penn Valley. This reason was cited by a higher percentage of men than women. The largest percentages citing convenience of location were at Maple Woods and Longview; this reason was cited by a higher percentage of women than men. The largest percentage of special students cited the presence of courses they wanted as the reason they enrolled.

3. Over one-half of the 691 students (56 percent), with the largest percentage at Penn Valley, indicated they believed all kinds of persons enroll at MJCD colleges. A fifth of all students, with the largest percentage at Longview, indicated persons enroll who want small classes and a good education. An eighth of the students, with the largest percentage at Penn Valley, indicated persons enroll who can't afford to go elsewhere. Only 3 percent of the respondents indicated students who enroll are those who were denied admission or "flunked out" elsewhere or students with below average high school grades. The largest percentage of students who indicated students enrolled because they flunked out or were denied admission elsewhere reported having been in the top third of their high school class academically.

4. Respondents in the sample group of college students indicated that reasons of much importance why more of their classmates and friends did not enroll at an MJCD college were (1) desire to live away from home (31 percent), (2) program wanted was not offered (25 percent), (3) they wanted a better college (24 percent), (4) advice of high school counselors and/or teachers (14 percent), (5) no information about MJCD (10 percent), (6) lack of money (10 percent), and (7) lack of transportation (7 percent). Reasons of some importance in order of mention were (1) wanted a better college (44 percent), (2) program wanted was not offered (39 percent), (3) advice of high school counselors and/or teachers (37 percent), (4) no information about MJCD (31 percent), (5) desire to live away from home (30 percent), (6) lack of money (26 percent), and (7) lack of transportation (22 percent).

5. The pattern of student response from each college as to reasons of greatest importance why more friends and classmates did not enroll was similar to responses of all students with the exception that students at Penn Valley indicated the desire for a better college as second order of much importance with lack of programs offered cited in third place. The largest percentage of students citing lack of transportation as a reason was at Maple Woods.

6. The pattern of responses by 691 college students as to reasons of some importance why more classmates and friends did not enroll in an MJCD college deviated in one respect from the pattern of total response. Students at Maple Woods Community College indicated the reason in second order of some importance was advice of high school counselors and/or teachers with lack of programs wanted cited as third order of some importance. Although lack of transportation was in the last relative order of reasons cited, it was thought to be of some importance by a fourth of the students at Maple Woods, 23 percent of the students at Longview, and a fifth of the students at Penn Valley. Lack of information about MJCD was consistently cited as the reason in fourth place according to order of mention by nearly a third of the respondents from each college.

7. Sources from which college students indicated they had obtained most information about MJCD colleges were (1) friends and relatives (32 percent), (2) written materials (28 percent), (3) high school counselors and/or teachers (13 percent), (4) representatives of MJCD and other high school students (7 percent each). The source of information for the largest percentage of students at Penn Valley had been word of mouth from friends and relatives and for students at Maple Woods it was from written materials. A higher percentage of students at Maple Woods and Longview than at Penn Valley had received information about MJCD colleges from high school teachers and/or counselors. A significantly higher percentage of part-time than full-time students had obtained information from employers, and a significantly higher percentage of full-time than part-time students had obtained information from high school counselors and/or teachers. About the same percentages of part-time and full-time students had received information from other sources. The largest percentage of students who reported being in the bottom third of their high school class obtained information from written materials, while the largest percentage of others obtained their information from friends and relatives. About the same percentage of freshmen and sophomores received information from each of the sources.

8. Forty three percent of MJCD students in the sample group of 691 believed the community college was giving them just what they needed in terms of what they planned to do later; 35 percent thought their preparation was very good in most ways but that it could be better in other ways. Three percent did not think they were being prepared well, and 18 percent indicated their preparation was fair but all of it could be improved. Evaluations among the colleges were similar. Higher percentages of students who did not expect to obtain a degree or certificate, and those who were uncertain, evaluated their preparation as being less effective than respondents who expected to earn a credential. Students enrolled part-time and full-time evaluated their preparation about the same. Evaluations by freshmen and sophomores were similar.

9. Less than 1 percent of the 691 MJCD students indicated persons enrolled because they flunked out or were denied admission elsewhere; only 2 percent indicated persons enrolled there because of below average high school grades.

10. Over three-fourths (76 percent) of the 8,928 MJCD students enrolled in the Fall 1972 indicated the college in which they were enrolled was the college of their first choice; 14 percent indicated it was a college of second choice, and 3 percent indicated it was a college of third choice; 7 percent did not respond.

11. One high school senior in ten thought that they should attend school somewhere other than an MJCD college to get a quality education.

7. Information Relative to College Offerings

A. Educational Programs

1. Approximately 20 percent of the 5,687 high school seniors responding aspire to the professions other than nursing, either immediately after completing their education or in ten years. Approximately 35 percent of all seniors had career aspirations in the "middle manpower" occupational spectrum.

2. The largest percentages of senior boys expressed interest in the following occupational categories as those in which they desired to work after completing their schooling: (1) professional other than nursing (19 percent), (2) mechanics or machine shop (6 percent), (3) drafting or building trades (6 percent), (4) military service (4 percent), (5) electricity or electronics (3 percent), (6) selling/salesman (3 percent), (7) entertainer (3 percent), (8) factory foreman/worker (2.5 percent), (9) agriculture and related (2.4 percent), (10) run their own business (2 percent). The largest percentage of senior girls expressed interest in the following occupational categories as those in which they desired to work after completing their schooling:

(1) office, clerical, secretarial (23 percent), (2) professional other than nursing (20 percent), (3) nursing (7 percent), (4) selling/saleswoman (4 percent), (5) laboratory technology - medical-dental-chemical (3.5 percent), (6) airline service worker (3.1 percent), (7) art--including interior decorator (2.4 percent), (8) bookkeeping/accounting (2.1 percent), (9) cosmetology (2.0 percent), and (10) entertainer (1.2 percent).

3. Occupational fields in which larger percentages of high school seniors expressed interest for ten years hence compared to near term occupational interests were (1) professional other than nursing, (2) running their own business, (3) law enforcement, and (4) computer programmer. Being a housewife was of long-term interest to girls and becoming an airline pilot was expressed as a long-term interest of boys.

4. About 44 percent of all high school seniors indicated they had interest in a field of study ordinarily associated with a baccalaureate or advanced degree, while approximately 23 percent expressed interest in fields usually identified with community college occupational education programs.

5. Fields of interest for further study identified by the largest numbers of high school seniors were in descending order of mention (1) liberal arts, (2) professional health services practitioner, (3) teaching, (4) general business, (5) nursing, (6) secretarial-clerical, (7) business administration, (8) engineering, (9) mechanical technology, (10) electronics technology, (11) agriculture and related, (12) accounting, and (13) computer programmer.

6. Representatives and executives of one or more Kansas City business, industrial or government enterprises indicated they needed types of manpower listed below:

A. Agriculture

Agri-business specialist
Agricultural technician

B. Business

1. Office Occupationa

Secretarial
Stenographer
Clerk-typist

2. Management Occupations

Accountant
Data programmer
Data processing technician
Credit & collections supervisor
Insurance & finance personnel

3. Sales and Advertising Occupations

Merchandising & marketing personnel
Advertising layout & copy writer
Assistant buyer
Traffic manager (shipping & receiving)
Outside salesman
Sales representative and/or estimator
Commercial artist

C. Health/Medical/Dental

Dental office assistant
Medical office assistant
Medical laboratory technician
Registered nurse (associate degree)
Surgical technician
Medical records secretary
Unit manager (nursing station)
Inhalation therapist
X-ray technician
Dental laboratory technician

D. Services

Cafeteria manager
Hotel & restaurant manager
Food preparation specialists
Community recreation aide
Educational AV technician
Social worker aide
Law enforcement officer
Fireman
Urban development aide

E. Industry/Engineering/Science

Aeronautical engineering technician
Chemical engineering technician
Civil engineering technician
Mechanical engineering technician
Electronics technician (communications)
Electronics technician (computer)
Electronics technician (industrial)
Electrical power technician
Engineering laboratory technician (general)
Architectural draftsman
Drafting & design technician
Industrial supervisor (foreman)
Service representative
Instrumental technician
Air conditioning heating/refrigeration technician
Operating engineer
Sanitation technician
Heavy equipment operator
A&P mechanic
Aviation transportation agent
Airline reservation agent
Air traffic controller
Aircraft electronics technician
Automotive technician

F. Others

Types of manpower suggested in addition to those listed were:

- Chemical laboratory technician
- Management trainee
- Maintenance man
- Construction technician
- Graphic artist
- Accounting clerk
- Technical writers
- Telephone technician
- People with biological and chemical backgrounds
- Architectural Materials Technician
- Ornamental Horticulture Specialist
- Medical Assistant
- Transportation Rate Clerk
- Retail Store Management
- Medical Receptionist-Secretary
- Structural Engineering Technician

7. Major regional manpower needs reported by the Civil Service Commission are covered by needs for types of qualified manpower listed above.

8. Occupations for which no need was indicated by executives contacted were fashion designer and teacher aide. Aircraft pilot (flying instruction) was not included in the listing to which executives responded.

9. Most of the 36 employers (77 percent)included in manpower requirement discussions indicated they found it necessary to recruit employees from outside the Kansas City Metropolitan Area. The most frequently mentioned reason was shortage of qualified local persons.

10. Nearly all of the largest firms represented (90 percent) operate organized training programs for employees as did over one-half (53 percent) of the others. Representatives of nearly all (91 percent) of the firms with an organized training program indicated that a more expanded college program of job improvement education could supplement or replace totally or partially their existing educational programs. All firms encouraged employees to find job upgrading experience.

11. A comparison of present occupational and future career goals of MJCD students revealed the closest relationship to be for men in semi-professional or technical occupations. These men appear to be upgrading job skills, while women are preparing for entry into these occupations. Men with jobs in the sales, skilled clerical, semi-skilled, and general labor occupations expect upward job mobility to the managerial or executive and professional occupations. Women in sales work or in skilled clerical fields of work expect to move upward into semi-professional or technical and professional types of work.

12. Twenty-one and 17 percentages, respectively, of men and women contacted in a sample group of 691 MJCD students indicated there were fields of study which can be studied immediately after high school not offered by MJCD colleges in which they would have been more interested than in the program in which they were currently enrolled. However, they failed on invitation to name the other fields. The largest percentage (23 percent) of students indicating there were other program fields of interest was enrolled at Maple Woods Community College and the smallest percentage (16 percent) was at Penn Valley.

13. The largest number of private trade and vocational schools in the Kansas City, Missouri area were in business, cosmetology, auto and aviation mechanics, electricity and electronics, data processing, and para-medical occupations. The major educational program area in which MJCD colleges are not developing programs is cosmetology.

14. Three public area vocational technical schools located in or near to the Metropolitan Junior College District are either now offering or developing an array of secondary school level occupationally oriented educational programs for youth and adults.

B. Guidance and Counseling Services

15. Twenty-eight percent of the 5,687 high school seniors included in this study were enrolled in a college preparatory curriculum, 34 percent were in a general curriculum, 19 percent were in a business/commercial curriculum, 6 percent were in an industrial arts curriculum, and 3 percent were in homemaking. Others were in some other curriculum or did not respond. Of boys and girls reporting they were in the top third of their class academically, 54 and 24 percent, respectively were in the college preparatory curriculum; 23 and 31 percent of the boys and girls, respectively, were in the general curriculum; and 9 and 18 percent of the boys and girls, respectively, were in the business/commercial curriculum. However, of the boys and girls in the lowest third of their class academically, 40 and 46 percent, respectively, were in the general curriculum, and 9 and 4 percent of the boys and girls,

respectively, were in the college preparatory curriculum; the rest were in an occupationally related curriculum. Nineteen and 12 percent of the boys and girls, respectively, in the middle third by academic class rank were in the college preparatory curriculum, and 38 percent of each were in the general curriculum.

16. Three percent of the seniors reporting they were in the top academic rank in their class indicated future plans would definitely or probably not include continuing their education, while 40 and 30 percent of the boys and girls, respectively, in the bottom third indicated plans would definitely or probably include further education.

17. High school guidance services relative to career and educational planning were perceived more favorably by the academically able high school students than others. Fourteen percent of all seniors indicated they had received all the help necessary; others indicated they had received less. Senior boys and girls not planning on further education indicated they had received less help than other seniors.

18. Seniors evaluated selected high school services and facilities such as library materials on vocations, variety of course offerings, college information, social activities, and someone in whom to confide about personal and other problems as "Poor," "Fair," and "Good," The largest percentage assigning a given evaluation indicated all services and facilities mentioned were "Fair," except confidential counseling services which were evaluated as "Poor." In general, students with no plans for further education, compared to other students, evaluated lower all services and facilities, except the provision of someone in whom they could confide about personal and other problems in regard to which ratings were about the same.

19. Selected college programs and services by order in percentage of use by 691 MJCD students were: (1) library materials, (2) counseling services, (3) academic advisement, (4) information about other colleges, (5) orientation to college, (6) career information, (7) student activities, (8) financial assistance, and (9) health services. Percentages of students indicating they had received some or lots of help ranged in the same order from 71 percentage relative to help from library materials to 5 percentage relative to help from health services. The relative order of students who had received "lots" of help was the same except that the order of use and amount of help was reversed for financial services and information on other colleges.

20. Over two-thirds (69 percent) of the 691 respondents in the sample group of MJCD students who reported having been in the bottom third of their high school graduating class indicated they planned to transfer to a four-year college or university after completing work at an MJCD college.

8. College Community Relationships

1. All executives of the 36 business, industrial and government enterprises represented in manpower requirement discussion groups indicated there were employment opportunities in their organization for persons with two years of technical or semi-professional training beyond high school.

2. Twenty (55 percent) of the employers indicated that employees with two years of training beyond high school have replaced or supplemented some of the college graduates in their organization.

3. The ways in which two years of education beyond high school was recognized in the organizations represented were: (1) job advancement (66 percent), (2) higher pay (53 percent), (3) initial hiring advantage (81 percent), and (4) greater job satisfaction or responsibility (5 percent).

4. Nearly one-half (47 percent) of the representatives were of the opinion that existing educational facilities in the area were only "fair" in meeting the off-the-job-training needs of employees, 28 percent indicated they were "poor," and 25 percent indicated they were "excellent." Whereas, 62 percent of the representatives from the largest firms indicated facilities were fair or poor, 93 percent of the representatives from smaller firms believed this was the case.

5. About 81 percent of all executives contacted would be interested in working further at a later date with MJCD officials in developing more realistic programs for job preparation, upgrading,or retraining.

6. Over two-thirds of the 5,867 high school seniors indicated they had friends or relatives who had attended classes at one of the Metropolitan Junior College District colleges.

7. Residents of the Metropolitan Junior College District contacted for interview expressed a high degree of confidence in the future of Kansas City, interest in the junior colleges, and general satisfaction with the progress and development of the Metropolitan Junior College District.

8. Need was expressed for more communication between the colleges and people in the areas served by them, especially the inner city area, and greater involvement of the community in planning programs and facilities.

9. Interviewees were, without exception, concerned more a about the further development of the total district than with the development of any one college. Each indicated support for policies and action in planning designed to foster an integrated, balanced system of programs and services throughout the District.

10. Persons expressing an opinion on the matter believed that, if the community was informed as to the achievements and progress being made by the District, there would be support for additional financing of the colleges in preference to support for some other purposes.

11. Preferences were expressed for future facility development favoring some additional construction at Penn Valley College while simultaneously completing new permanent facilities on each of the suburban college campuses rather than constructing complete facilities for one of the suburban colleges before starting the construction of facilities on the other one.

9. Community College Enrollment Status and Projections

1. A comparison of projected and actual head count and full-time equivalent (FTE) enrollments reveals that actual enrollments for the years 1968-69 - 1972-73 have been under previous forecasts. FTE enrollments have corresponded reasonably close to the ones forecast, but actual head count enrollments have been considerably below the levels forecast.

2. Head count enrollments in the MJCD increased 41.7 percent between the 1969-70 and 1972-73 school years, and full-time equivalent enrollments during the same period increases 47.7 percent.

3. In the fall of 1972, MJCD head count enrollment was 9,592 and FTE enrollment was 7,530. Head count enrollments were 2,949 at Longview, 1,784 at Maple Woods, and 4,859 at Penn Valley. FTE enrollments were 2,436 at Longview, 1,406 at Maple Woods, and 3,688 at Penn Valley

4. During the fall of 1972-73, MJCD FTE enrollment was 78.5 percent of head count enrollment. At Longview, Maple Woods, and Penn Valley the percents were 82.6, 78.8, and 75.9, respectively.

5. Head count enrollments in each of the colleges constituted the following percentages of enrollments in the MJCD: 30.7 percent at Longview, 18.6 at Maple Woods; 50.7 percent at Penn Valley. Corresponding percentages for each college share of FTE enrollments were: 32.3 percent at Longview, 18.7 percent at Maple Woods; and 49.0 percent at Penn Valley.

6. While the head count enrollment at Maple Woods has remained at a fairly constant level as a proportion of total MJCD head count enrollment, the proportion of total District head count has been gradually increasing at Longview and gradually decreasing at Penn Valley.

7. The percentages of both head count and FTE enrollments from one year to the next over the past four years have been decreasing; the decrease has been most pronounced at Longview and Maple Woods Community Colleges.

8. In the fall of 1971, officially there was a 70-30 percentage division for the MJCD total full-time and part-time head count day enrollments; in the fall of 1972, the division was about 61-39 percent. The evening head count enrollment in 1971 was 7 percent full-time and 93 percent part-time, but in the fall, 1972 the division was 10-90 percent.

9. Of the 8,928 MJCD students enrolling in the fall, 1972, from whom information was obtained, larger percentages of female than male students reported they were enrolled on a part-time basis. Although one-half of all students in the MJCD for whom information was obtained reported they were enrolled part-time, the largest percentages of part-time students were at Penn Valley and Maple Woods Community Colleges (52 percent). Forty-seven percent of the students at Longview Community College reported they were enrolled part-time. (We note here that students' interpretation of their enrollment status differs slightly from official college records on the matter.)

10. The ratio of part-time to full-time day and evening head count enrollments in the MJCD for the years 1971 and 1972 was 1.234. The ratio of part-time to full-time FTE day and evening students was .493 in the MJCD for the two-year period.

11. Program composition of full-time enrollments was as follows for the fall 1971 and the fall 1972: Collegiate transfer, 43.6 and 62 percentages, respectively; occupational education, 25 and 32 percentages, respectively; and, special/unclassified, 31 and 6 percentages, respectively. For part-time students, the percentages were, respectively, collegiate transfer--33 and 49; occupational education--26 and 32; special/unclassified--41 and 19.

12. Fall enrollments over the past four years revealed that 88.8 percent of the full-time head count enrollments were from the MJCD, 9.6 percent were from Missouri outside the MJCD, and 1.5 percent were from out of state. Of all part-time enrollments during this period, 90.2 percent were from the MJCD, 7.9 percent were from Missouri outside the MJCD, and 1.9 percent were from out of state.

13. Approximately 6 percent of all enrollments at Longview and Penn Valley were from Missouri out of the MJCD, but at Maple Woods students from this source comprised about 22 percent of the total enrollment.

14. Fall enrollments for the three year period, 1970-1972, inclusive, revealed that freshmen comprised 72 percent of the total enrollment, and sophomores comprised 28 percent. Percentages of freshmen in 1970 and 1971 who commenced the sophomore year the next fall were 50.1 and 47.6, respectively. These retention rates are low.

15. Enrollments in grades 9-12 for all high schools in the MJCD are expected to decline by 19 percent between the 1973-74 and 1980-81 school years. The number of high school seniors is expected to decrease about 22 percent between 1977-78 and 1982-83.

16.* Each year since 1969-70, actual enrollments in the MJCD have increased gradually as a proportion of the potential enrollment which exists. The ratio of .164 between FTE college enrollments and numbers of youth in high school in 1972-73 is still below the .250 level which is a minimum level of service that reasonably could be expected. Each college has annually increased its service level with the exception of Maple Woods which had a decline between 1971-72 and 1972-73.

17.* Peak daytime head count enrollment potentials for the years 1973-74 - 1980-81 are 3,500-5,000 at Longview, 1,925-2,740 at Maple Woods, and 4,640-7,140 at Penn Valley. Peak daytime FTE enrollments are 3,722 at Longview, 2,246 at Maple Woods, and 4,741 at Penn Valley.

18.* Declining enrollment potential is expected to result in day head count enrollments in 1980-81 of 2,460-3,500 at Longview, 1,760-2,500 at Maple Woods, and 3,340-5,140 at Penn Valley. FTE day-time enrollment levels in 1980-81 are expected to approximate 3,207 at Longview, 2,050 at Maple Woods, and 3,412 at Penn Valley.

19. Taking into account expected increases in population projected to years 1980 and 2000, facilities designed to accomodate FTE enrollments of 3,500 at Longview, 2,500 at Maple Woods, and 5,000 at Penn Valley will be adequate in 1980. After 1980, facilities for an additional 1,500 FTE day students are expected to be needed at Maple Woods College. Other facilities are expected to be adequate.

20. Total MJCD head count enrollment potential is expected to approximate 15,601 in 1980-81 and the expected FTE enrollment potential is expected to approximate 11,448 in the same year.

---

* These enrollment estimates are based on the assumption that conditions will change to generate levels of enrollment more nearly in line with the potential. Thus, an increase from .164 to .290 in the service level has been anticipated.

10. Status of Metropolitan Junior College District Development

1. The broad philosophical framework for the development of educational programs and services in the Metropolitan Junior College District (MJCD) has been established by the Board of Trustees and amplified by the identification of specific objectives at both the district and college levels. Commitment is made to a multi-institutional system which is to serve persons of all ages throughout the District (youth and adults alike) through an "open door" admissions policy and under conditions which foster equalization of geographical and financial accessibility through programs and services geared to differing educational needs of the various communities within the district.

2. The chief administrative officer of the MJCD is the chancellor to whom a president of each college is directly responsible. Staff and support services provided by the District Offices includes administrative and personnel services, relationships with governmental agencies at all levels, business services (including payroll, campus bookstores, and purchasing), facilities planning, data processing services, construction and maintenance services, production of instructional media, institutional research services, and occupational program coordination and development. The administrative structure at each college is similar and provides for the functions of business, academic, and student affairs and college management and administration.

3. During the fall of 1972 the following numbers of counselors, faculty, and secretaries-clerks were reported employed at each college.

	Teaching Faculty	Counselors		Administrators	Secretaries and Clerks (except library-media or business)
		Full-Time	Doubling		
Longview	63	4	4	5	10
Maple Woods	39	2	2	5	12
Penn Valley	119	10	--	11	29

Staffing patterns involving other types of personnel reflect variations in institutional size, programs, and services.

4. Ten occupationally oriented programs were offered in the year 1967-68; 18 were offered during the fall of 1971; and 40 were offered during the fall of 1972. There is some program differentiation by college most notably auto mechanics at Longview, allied health and medical technologies at Penn Valley, and aviation at Maple Woods.

5. MJCD full-time students enrolled in collegiate transfer programs during the fall comprised 44 percent of the head count enrollment and in the spring of 1973 they comprised 61 percent. MJCD part-time students enrolled in collegiate transfer programs during the fall of 1971 comprised 33 percent of the head count enrollment compared to 47 percent enrolled during the spring of 1973.

6. Approximately a fourth of the full-time and part-time students enrolled during the fall of 1971 were in occupational programs, and during the spring of 1973 approximately 31 percent of each were enrolled in occupational programs.

7. During the fall of 1971, 31 percent of the full-time students and 41 percent of the part-time students were in a special or unclassified category, but in the spring of 1973 about 8 percent of the full-time students and 21 percent of the part-time students were in this category.

8. The percentages of full-time students in collegiate transfer programs during the fall of 1972 were 66 percent at Maple Woods, 62 percent at Longview, and 60 percent at Penn Valley; percentages of part-time students were 44, 39, and 56, respectively. In the same semester the percentages of full-time students in occupational education programs were 36 percent at Penn Valley, 31 percent at Maple Woods, and 28 percent at Longview; the percentages of part-time students in those programs were 32, 37, and 29 percent, respectively.

9. Largest percentages of special and unclassified students are part-time students, and in the spring 1973 semester, they comprised 34 percent of the part-time enrollment at Longview, 27 percent at Maple Woods, and 12 percent at Penn Valley.

10. During the spring 1973 semester, there were over 100 FTE enrollments in eight program classifications, 51-100 FTE enrollments in 11 program classifications, 16-50 FTE enrollments in 8 program classifications, 15 and fewer FET enrollments in 25 program classifications, and no enrollments in 13 program classifications.

11. Some community services are provided by each of the colleges with considerable variance among them in terms of extent and nature of the services provided. While nearly all services provided fall under the classifications of educational extension, cultural development, and leisure time activity, the predominant effort is educational extension. None of the colleges have fully developed comprehensive community services programs.

12. Most elements of good student personnel programs are present in the MJCD colleges, but some are in an embryonic state of development on one or more of the college campuses. There is a wide variance among the colleges in the development of some elements.

    The least well developed among all the colleges is the pre-college information aspect of the orientation element, the basic skill development and remediation clinic and laboratory aspect of personal aid services to supplement and support remedial classes, and food services. At Longview and Maple Woods, the other least developed element is placement services.

13. Phase one of the facilities long-range plan will be finished when present construction terminates on the student center-instructional facility at Longview and Maple Woods Community Colleges. The first phase permanent facility at Penn Valley Community College is completed. District offices occupy the 560 Westport Road facility formerly used for instructional purposes.

14. The equalized assessed valuation for 1972 in the MJCD was $1,719,304,433. If district boundaries remain the same as they are now, it is expected that in 1980, the equalized assessed valuation will at least approximate $2,288,031,700-$2,304,203,419.

15. Percentages of revenue for MJCD operation purposes in 1970-71 were 38.2 percent from state and local taxes, 30 percent from state aid, 22.6 percent from student fees, 6.2 percent from Federal sources, and 3 percent from other sources.

16. The percentages of budgeted expenditures for 1972-73 were 62.2 percent for instruction and instructional resources, 14 percent administration, 12.6 percent for plant operation and maintenance, 8 percent for student affiars, 1.8 percent for general instutional expenses, and 1 percent for contingency. Percentages of the projected budget for 1974-75 are 59.6 percent for instruction and instructional resources, 16.5 percent for plant operation and maintenance, 13.4 percent for administration, 8.1 percent for student affairs, 1.5 percent for general institutional expenses, and .9 percent for contingency.

17. There has been a gradual annual increase in total operating expenses per full-time equivalent student. The business affairs office has projected a decline in FTE operating expenditures after 1972-1973 due to the effect of increased enrollments. The FTE expenditure for operation was $921 in 1971-1972 and it was projected to peak at $953 in 1972-1973.

18. Operating budgets of the colleges reflect variations in size and nature of facilities. The proportion expended on instruction approximates a satisfactory level but on the low side. After 1972-73, the MJCD faces a deficit between general fund revenues from all sources and required expenditures for operating purposes.

19. Retirement of the capital indebtedness incurred for facility development will be fully amortized in 1990. Levy for debt retirement purposes is expected to decline gradually from 14 cents per $100 of equalized assessed valuation necessary in 1972.

11. Comparison of Development and Previous Recommendations

1. The development of facilities for each of the colleges is on schedule and the phase one development is nearly completed.

2. Although student fees and state aid have been increased, the assessed valuation base of MJCD has increased at a rate higher than predicted, the local tax levy for community college operation was increased and all sources of funds exploited, a predicted imbalance has developed between amount of revenue available and amounts of funds required for necessary operating expenditures.

3. Enrollments have not developed as rapidly as forecast. The greatest deviations have been in a considerably smaller number of part-time students and a considerably larger attrition rate between the freshman and sophomore years than anticipated.

4. Basic organizational and administrative structure has developed as recommended and organizational mechanisms such as district-wide committees and councils have been established to facilitate communication and coordination. The major deviation has been in the development of three colleges in a multi-institutional system rather than three campuses of a single college.

5. Most occupational programs recommended have been implemented with some specialization at each of the colleges. Some programs for which need was identified have not been developed, especially in agriculture and engineering/industrial fields. Strong programs in the fine arts and performing arts have not been fully developed.

6. The percentage distribution of occupational education enrollments in business and service occupations has been higher than anticipated, but it has been considerably lower in the industry/engineering/science category. A 34-66 percentage division between collegiate transfer and occupational education programs for classified full-time day students is different than the 50-50 percentage division envisioned.

7. Although most of the elements of a student personnel service program exist at each college, status of development is uneven and some of the least well developed elements are those that reach out into the community such as pre-college informational aspects of orientation and job placement and follow-up.

8. The development of community services beyond some extension classes and leisure time activities is in its embryonic disk.

Conclusions

This section contains what we think about various things pertinent to future development of MJCD, based upon the findings of the study. Since our task is to provide recommendations for future development, we have focused upon positive aspects of previous development and present status, as well as upon broad areas for future development. Since this study did not include a comprehensive evaluation of all aspects of the MJCD and individual college operation (e.g., faculty qualifications, effectiveness of instruction, quality of collegiate transfer programs, methods and techniques used for the improvement of instruction, conditions of employment, intra-college administrative procedures and processes, etc.) there may be, and probably are, many positive things extant but peripheral to the central purpose of this study about which we have no evidence as a basis for conclusion.

Evidence presented in this study seems to warrant the conclusions presented below.

1. Since 1967, the Metropolitan Junior College District has made tremendous progress in its development as a comprehensive multi-institutional system of community colleges. A three-college system has been implemented. Sites were acquired in appropriate locations and facilities provided; some were of a temporary nature. The provision of permanent physical facilities is on target, and planning for the second phase of development has already begun. The broad philosophical framework for the development of educational programs and services in the District has been established by the Board of Trustees and amplified by the identification of specific objectives at both the district and college levels. Basic organizational and administrative structure have developed, and organizational mechanisms such as councils and working committees have been established to facilitate communication and coordination. Head count enrollments have increased from 5,887 in 1968-69 to 9,592 in 1972-73, and full-time equivalent enrollments increased from 4,258 to 7,530. The number of occupational oriented college programs has increased from 10 in 1967-1968 to 40 in the spring 1973 with some specialized programs located at one of the colleges and not at the others. Most occupational programs recommended in 1968 have been implemented.

2. While there have been increases in student enrollments in both collegiate transfer and the expanding numbers of occupational (technical and semi-professional) programs, student personnel support services essential for the effective development and implementation of these programs have developed unevenly among the three colleges and are as yet incomplete.

Most elements of essential student personnel services programs exist on each campus, but among the least well developed are (1) pre-college informational aspects of orientation and (2) job placement and follow-up services--activities that reach out into the community to prospective students and consumers of the products. The latter are particularly lacking at Longview and Maple Woods and follow-up activities after placement are generally lacking. Lacking development and utilization to the extent needed are the basic skill development and remediation clinical and laboratory aspects of personal aid services designed to supplement and support remedial or skill development classes. We note with interested concern, that between the fall of 1971 and spring of 1973, the percentages of students enrolled in the special/unclassified category have declined. The percentage difference in the decline of students in this category has nearly equaled the percentage increases in collegiate transfer enrollments. We question whether, if significant percentages of students in earlier semesters were thought to need developmental or remedial services and education before they actually chose a program, such a decreased percentage of more recently enrolled students is because they are so well prepared and motivated that there is no need for a strong "vestibule program."

3. The need for all community college programs identified by Arthur D. Little, Inc. in 1968 as a consequence of in-depth interviews throughout the Kansas City, Missouri area have been validated by demand expressed by employers participating in this study, with the exceptions of fashion designer and teacher aide which were included in the inquiry and aircraft pilot which was excluded from the inquiry. This conclusion is based upon a comparison of programs indicated as needed and shown in Chapter VI and the needs identified in the 1967-1968 study. Some additional needs were expressed in this study which are included in the recommendation section of this chapter.

4. The development of community educational services programs is the least well developed of functions needed by MJCD in developing a comprehensive system of public community colleges. Some community educational services are provided by each of the colleges with considerable variance among them in terms of extent and nature of activities provided. None of the colleges have fully developed comprehensive community educational services programs, and the predominant effort is limited to the development of some extension classes. There is not recognition and identification of this function in the staffing patterns of either the District or the colleges by job title or hierarchical placement. An effective and comprehensive program of community educational services is one of the most effective ways of generating credit enrollments.

5. *The counseling and guidance system operating throughout the MJCD as it relates to educational and career planning and program alignment of students is urgently in need of major improvement.* Although 44 percent of the MJCD students indicate they came to community college for job preparation or job upgrading purposes, slightly under a third of either part- or full-time students were enrolled in occupational curricula. About 20 percent of all high school seniors see themselves as professionals, either immediately or ten years hence,and about 35 percent had career aspirations in the middle manpower occupational spectrum (these are realistic aspirations, since about 16 percent of the labor force in the Kansas City SMSA in 1970 and in the nation by 1980 is in the professional-managerial category,and since about 40 percent of the U. S. labor force work at middle manpower levels). At the MJCD campuses officially, 61 percent of the full-time head count students and 48 percent of part time head count students were in collegiate transfer programs during the 1972-73 school year. Fifty-eight percent of the MJCD men and 42 percent of the women students expect to transfer to a four-year college or university, including 69 percent from the sample group of 691 college students who reported they had been in the lowest third of their high school class academically. Furthermore, 60 percent of the MJCD men students and 43 percent of the women students expect to earn a bachelor's or higher degree.

The aspirations of high school seniors seem quite realistic in terms of the way the manpower structure exists in the KCSMSA and the nation. Considering that only 28 percent of them are in the college preparatory curriculum with a rather large group expecting to enroll directly in four-year institutions rather than MJCD colleges, it seems unreal that from a student pool composed of many persons who were not college bound in high school (and were thus not properly prepared for baccalaureate-oriented studies) such a high proportion have now opted for the collegiate transfer program. Research literature supports the notion that the more mature a person, the more realistic are his expectations and aspirations; however, evidence from this study leads one to conclude the opposite is the case here. Youngsters might be expected to engage in fantasies about their life's work; but, persons ranging in age from 19-40 would be expected to face up to reality, and the MJCD colleges should help them to do so.

Eighty-one percent of the college students enrolling in the fall of 1972 expected to work off campus, and 51 percent of the men and 40 percent of the women expected to work nearly full-time (33-40 hours per week). Sixty percent of all students were in collegiate transfer programs,and 56 percent of all students were enrolled part-time. These data would cause one to wonder how some students find enough time in the week for both job and study, and whether if academic demands of MJCD programs meet collegiate transfer standards, what happens to these students.

6. Methods of communication with potential students and the public about MJCD college programs and services and assistance available (financial and developmental learning resources) need improving. One in ten seniors indicated they did not have enough information about MJCD colleges as a reason for not planning to enroll there. About four of every ten college students in the group of 691 contacted indicated they believed lack of information about MJCD colleges was of some or much importance as a reason why more of their friends and acquaintances did not enroll. Only one in eight community college students indicated high school counselors and teachers were his source of information about MJCD, and this information source was revealed as of relatively minor importance as a source of information. Eleven percent of the seniors indicated the reason of most importance for not planning to continue their education was that it was too expensive and they could not afford it, and 9 percent cited this as a reason of second order of importance. Thirteen percent of all seniors indicated they would definitely or maybe change their plans to include more education if more money were available. MJCD residents interviewed expressed need for more communication between the colleges and people in the areas served by them.

7. Although enrollments have increased markedly since 1967, enrollment has been less than might reasonably be expected; and, the enrollment mix by program has not developed in accordance with either expectations or forecasts, given the sociological and industrial context in which the MJCD exists. Previous forecasts in 1967 of head count and full-time equivalent (FTE) enrollments were 13,130 and 8,120, respectively, but they actually were 9,592 and 7,530, respectively. The ratio of .164 between FTE enrollments and the total enrollment in grades 9-12 of all high schools in the MJCD is below the minimum potential level of .250 commonly found among midwestern community colleges. Instead of the ratio of part-time students to full-time students increasing to approximately 2.500, the ratio has decreased to 1.234. The ratio of full-time sophomores to full-time freshmen has decreased to .39 instead of increasing from .42 in 1967 to .66 as expected. The percent of unclassified enrollments to full-time enrollments decreased to 7.7 in the spring of 1973, well under the stabilized percent of about 12 percent expected. FTE enrollment as a proportion of head count has remained at about 78 percent instead of the 60 percent that might be expected. There have been considerably smaller proportions of part-time enrollments and a markedly higher attrition than

expected between freshmen and sophomore years.

Eighteen percent of the high school seniors expected to attend a community college and only 16 percent expected to enenroll in an MJCD college. This is low compared to other districts in Michigan, California, and Florida where 50 percent are found to be interested in attending the local community college. For example, it is also low compared to 27 percent of 3,500 high school youth in the Moline, Illinois area who indicated in a similar inquiry that they expected to attend their local community college. Since continuing education after high school was found in this study, as well as others, to be related to level of parents' education one would expect that in the MJCD where the level of education attained by residents is higher than usual that larger percentages of youth than usual would be attracted to the local community college.

8. There is need for strengthened commitment to occupational education in the Metropolitan Junior College District.

Three fourths of the executives of industry, business and government enterprises participating in the study indicated in their opinion existing educational facilities in the area were only "fair" or "poor" in meeting the off-the-job training needs of their employees, and that includes MJCD. Seventy-seven percent indicated they found it necessary to recruit employees from outside the Kansas City Metropolitan area, and lack of locally qualified personnel was the most frequently cited reason. Three percent of the 691 college student group indicated after they leave MJCD they expect to enroll in a trade or technical school; 11 percent of the high school seniors believe the program they want is not offered at an MJCD college, and approximately two thirds of the college students indicated the absence of programs they wanted was of some or much importance as a reason why more of their friends and acquaintances did not enroll.

The 31-61 distribution of all full-time students between collegiate transfer and occupational education programs, or the 34-66 distribution excluding unclassified students, at a time when 44 percent of 8,928 students enrolling in the fall of 1972 indicated the reason they enrolled was to prepare for entering an occupation requiring technical skills or an associate degree or to acquire skill for job advancement, would indicate the need of more emphasis on placement in occupational education programs. Colleges with successful and heavily enrolled programs of occupational education really promote it, and as a final measure they exercise a certain amount of direction over the election of programs and courses. Students with poor academic records from high school and with aptitude test results which point to success in an occupational field, are strongly advised to select a career objective at the associate degree or certificate level. The job opportunities, salary, working conditions, etc. are all carefully explored, and the student's academic limitations are firmly pointed out to him. If, after such a directive advisement session, the student still insists on a baccalaureate degree objective, he is allowed that objective as a long term goal, but he is not allowed to enroll, willy-nilly, in collegiate-level transfer courses for which his academic skills level (reading, writing, mathematics) would indicate nearly certain failure. He is directively placed in remedial courses with the contract that when he gets his academic skills up to par, he can proceed with transfer courses.

Too much permissiveness in the choices students make of courses and curricula in the implementation of the open door philosophy results in either an abnormally high attrition rate or a disastrous non-punitive, non-competitive learning, no standards attainment condition which will render the associate degree in the eyes of employers as meaningless as the high school diploma as a mark of differentiated levels of proficiency attainment. Results will parallel those already observed in states like Minnesota, Wisconsin, Virginia, Ohio, Connecticut, and Tennessee--where serious students who want to get good training for occupations are beginning to desert community colleges in droves and head for the nearest technical institute or post-secondary vocational school, where they can get no-nonsense training with realistic standards of attainment and be placed on a job when they get out. A number of occupational programs are operating (some are relatively new) and there are persons concerned about this role of the MJCD colleges and working to provide good programs. However, there has not been either at the district or college levels the necessary identification, by job title and hierarchical placement, with occupational education which would automatically give it status in the minds of students, faculty, and the public. Full commitment to this function needs to be strengthened by visible leadership in the top levels of administration.

9. Changes in the industrial and occupational structures of the labor force in the Kansas City Standard Metropolitan area, and the expected increases in numbers of persons residing in the Metropolitan Junior College District and their distribution will need to be taken into account in planning for future facility and program development. The expected population growth of approximately 145 percent between the years 1970 and 2000, most of which is expected to occur after 1980, has long range implications for planning permanent facilities at Maple Woods College. The expected increases in

the service industries, government, wholesale and retail, insurance, real estate, and transportation sectors of the industrial structure and the above average growth in the proportion of professional, technical, and kindred workers in the occupational structure point to the need for program development emphasis. In view of these trends, one is struck by the present relatively low levels of enrollment in business, health, and public service programs. Many community colleges would have 20 percent of the total student body enrolled in business programs alone, but MJCD has only about 10 percent. With the tremendous complex of hospitals, clinics, and health facilities in the Kansas City area, the enrollment in health-related programs ought to be double its present 5.4 part-time and 7.7 full-time percent. With government and public service predicted to provide one job in every three in the Kansas City SMSA by 1975, the very low enrollments in public service related programs (4.1 percent full-time and 6.1 percent part-time) need to be increased appropriately.

The largest percentage increases in the age composition of the population between 1970-1980 and 1970-2000 for persons under age 60 are expected in the 20-29 and 30-39 age groups. While the proportion of persons age 19 is expected to constitute a declining proportion of the population, their numbers are expected to increase by one third. Increasingly, the educational needs and interests of adults will provide a fruitful potential for the development of programs and services. The relatively lower economic conditions of residents in the four-county portion of the Kansas City SMSA, of which MJCD comprises a major part, compared to the entire SMSA, is a condition which should be taken into account in considering policies and factors associated with the provision of equal access to all residents of community college programs and services.

10. The Metropolitan Junior College District interface with the communities included in the District needs strengthening and further development. Outreach programs and activities and effective working and communication linkages of many types at both the District and college levels are needed. While appropriate and extensive use has been made of ad hoc lay groups for the identification and definition of need for and development of occupational programs, continued use of this means for monitoring and evaluating these programs has not been employed. Eighty-one percent of all executives participating in this study indicated interest in working further with MJCD officials in developing more realistic programs of job preparation, upgrading, or retraining. Ninety-one percent of the employers in firms with organized training programs indicated that a more expanded college program of job improvement education could supplement or replace partially or totally their existing educational programs.

Community services at both the district and college levels have not been developed through the use of ad hoc or continuing committees or community councils. The interface between pre-college information orientation and job placement and follow-up activities, and the career counseling staff and the community agencies, organizations (including high schools, area vocational technical schools, and other colleges) and employers is almost non-existent. Effective regional educational coordinating efforts in specialized areas such as guidance and counseling, transfer of credits, and occupational education need initiating and strengthening.

No regular organized periodic sessions are conducted with non-professional personnel to orient them to the mission and purposes of the Community Colleges or to inform them on the achievements of the system. Likewise the same applies to the many professional people who teach part-time and in some cases are responsible for an important program component of training. The strong advice of one executive participating in this study was, "Be sure and use the associations when you deal with industry for training programs." This good advice calls for effective linkages which cannot be made from behind desks in a college office.

11. There needs to be an orderly means by which decisions can be made about the placement of new educational programs in the colleges. The development of a systems analysis approach to planning (Program Evaluation Review Technique--PERT or similar scheme) recommended in the prior 1967 study has not been effected. Lacking such a planning approach and a district plan for curriculum development has precipitated confusion and some frustration relative to the development of occupational curricula and community educational services. The results are voids and slow-downs in the development of some programs and the possibility of undesirable forms of competition where interests coincide and appear to be in conflict. There are no hard data to document this conclusion except information obtained during the course of the study from interviews, discussions, and observations.

Central to a resolution of this problem is the clarification of what is meant by the concept of comprehensiveness. The differing frames of reference and interests of various individuals in the system leads to differing views about what this concept means in practice. Our conclusion is that the frame of reference for this concept should be the entire district, rather than any single college, and the totality of programs and services made available somewhere within the District under conditions which foster equal access to them. This definition of the concept is in harmony with the basic philosophical framework established by the Board of Trustees. Such a definition is not in conflict with the concept that each campus should be of equal status, that each should offer a comprehensive educational program, or that each should have a full complement of facilities. The concept of comprehensiveness as applied to each individual college means that no college will be specialized and limited to offering programs of one type to accomplish only one of the several functions (e.g., collegiate transfer, occupational education, general educational development, etc.). Each college will provide some programs and services in terms of each function, but possibly no one college will ever offer all things possible in terms of all functions. To accomplish best the goals of the system, the Metropolitan Junior College District, we conclude the concept of comprehensiveness as it applies to service throughout the entire District is essential.

12. If the Metropolitan Junior College District is to provide its present level of programs and services and to realize its potential level of prospective service based upon sound past progress, additional financial resources are necessary for both operating and capital purposes. Monies derived from a bond issue authorized by the voters in 1965 have been wisely used and depleted in providing facilities, including a large permanent facility at Penn Valley College. Due to rapidly rising costs, even though all possible sources of revenue have been exploited and in spite of increases in student fees and state aid, the amounts of revenue available for operation after 1972-73 are less than the expenditure requirements.

13. A Continuation of permanent building construction in the Metropolitan Junior College District is urgently needed to adequately house instructional programs and services. Temporary facilities provided at Maple Woods and Longview College sites acquired by the District Board of Trustees enabled the suburban colleges to begin serving youth and adults in the north and south portions of the 400 square mile District. These facilities have been used to capacity while major permanent facilities were being constructed at Penn Valley College. Plant and maintenance costs have risen from 3.4 percent of the annual operating budget in 1969-1970 to 12.6 percent in 1972-1973; and they are projected to reach a level of 16.5 percent by 1974-1975. Meanwhile, even though the proportion of the operating budget for administration has decreased (as it typically does as a new college system develops), the excessively high cost of plant operation and maintenance detracts from the proportion of the operating budget expended on instruction and instructional resources. Temporary facilities provide a good solution for temporary start-up purposes, but with age they become expensive to maintain.

Preferences expressed by residents interviewed with an opinion on the matter were for future facility development to include some additional construction at Penn Valley while simultaneously completing new permanent facilities on each of the suburban college campuses compared to other alternative lines of action.

Enrollment forecasts based upon past trends and future projections, including expected population redistribution within the MJCD to the years 1980 and 2000 indicate the need for permanent facilities to accommodate 3,500 FTE students in 1980 and 2000 at Longview, 2,500 FTE students at Maple Woods in 1980 with expansion to 4,000 after 1980 and before the year 2000, and 5,000 FTE students at Penn Valley.

The 560 Westport Road facility, containing 36,783 square feet and now housing District offices has served as one of several interim and temporary facilities for Penn Valley College instructional programs while permanent facilities were being constructed. Due to the age of this building, the antiquated condition of mechanical equipment, and poor structural design of the roof, annual maintenance costs are excessively high and expected to increase. The lease for land north of and adjacent to this facility from the city expires June 30, 1974.

Recommendations

1. The District and its Governance

   a. Future development of the Metropolitan Junior College District should proceed on the sound philosophical basis already established, without modification.

   b. Action should be taken as soon as possible to ascertain the probability that additional adjacent high school districts, from which the MJCD colleges draw significant numbers of students, could become part of the Metropolitan Junior College District. These high school districts are Independence, Liberty and those serving the other areas such as Claycomo, and Pleasant Valley in Clay County north of the present location of Maple Woods College, and districts serving the area immediately adjacent to the boundary of the MJCD south of the Longview College location. The purpose would be to provide more services and opportunities to greater numbers of residents who are already making limited use of them.

   c. Size of the MJCD staff should be kept to the minimum necessary to provide district-wide specialized services and administrative and coordinative services.

      (1) Except for district office staff, the president of each college,and grounds and maintenance personnel (excluding custodians and security personnel), full responsibility should be relegated to the individual colleges for the employment and dismissal of all professional and non-professional staff.

      (2) Each college should have the flexibility to develop its own staffing and organizational pattern consistent with broad district-wide guidelines.

      (3) A delineation of administrative duties and responsibilities within each college is essential to a smooth and effective operation.

      (4) Whatever the internal pattern of organization at each college, whether it be along divisional or departmental lines, much more responsibility than in the past should be relegated to the chairman and the organizational unit. Strengthened instructional committees are needed at each college to provide more faculty involvement in curriculum development.

(5) The Board of Trustees through the Chancellor should hold each college president responsible for results.

(6) Business services and management should always remain a function of the District office.

(7) Coordinators of occupational education and community services should be added at the district level.

(8) Program planning research and evaluation and governmental relations should be staff services centralized in the district office.

2. Curriculum Development

a. A systems approach to planning should be adopted for the development of a master plan, subject to periodic re-examination and revision, for the development of occupational education curricula and their placement in the colleges.

b. The collegiate transfer programs should continue to receive full support for maintaining high levels of quality as the total college program is expanded further to meet future needs.

c. The core and cluster approach to the development of occupational programs should be followed.

d. The use of special *ad hoc* lay advisory committees should be continued as a means of identifying and defining need for occupationally oriented programs, but use also should be made of this means for monitoring and evaluating the programs after they are implemented.

e. Enrollments in all the basic fields of the allied health and medical technology programs should be expanded.

(1) Programs in the allied health and medical technologies should remain concentrated at Penn Valley College.

(2) Every effort should be made in working with the Kansas City Hospital Association staff and other appropriate agencies and individuals to expand programs for the preparation of paraprofessionals in this field.

(3) Clues from this study as to the need for the following programs should be explored: dental laboratory technology, medical-receptionist secretary, medical office assistant, dental office assistant, surgical technician, and unit management. Exploration should be made as to the need for programs to prepare specialized medical instrument technicians of the sort needed to operate and trouble-shoot the kinds of sophisticated equipment now being used in many hospitals, most of which features electronic-hydraulic-mechanical components.

(4) Hospital administration should be eliminated from the list of possible occupational programs to be offered in this field.

f. There appears to be a need for qualified workers in several mechanical fields related to machine operation. One of the colleges could well offer some short-term (8-16 weeks) intensive training programs in these fields for persons who already have the necessary maturity and mechanical aptitude. The fields are: maintenance mechanics for heavy equipment, heavy equipment operators, building "engineers" (for building mechanical systems), and over-the-road "semi" truck drivers.

g. In the business related field a concerted effort should be made to improve the quality of and to increase enrollments in all phases of business education--secretarial and stenographic training, accounting and business management, data programming, sales and marketing, finance and insurance. Such programs should be available at all three campuses with the possible exception of data programming and finance/insurance.

(1) The education and training of top-drawer secretaries and stenographers should be a high order of business of MJCD. There ought to be three levels and a certificate of attainment should be awarded to those who meet the standards.

(a) Secretary, with a few specialties like legal, medical, technical. An associate degree program with high standards. Eliminate students who don't make it!

(b) Stenographer--one or two years. Could be either associate degree or certificate.

Issue an atainment certificate. Hold high standards. Don't certificate anyone who doesn't make it.

(c) Clerk-typist or general office worker. One-program. Typing 50 words per minute and competence in general office skills. No attainment--no certificate.

(2) Every possible effort should be exerted to build enrollment in the co-op stenographic program.

(3) The regional demand for graduates of a certificate program in restaurant food service management should be restudied, and if firm, there should be increased efforts at recruitment of students or the program should be dropped.

(4) Explorations should be made as to the need for a program in sales and advertising, transportation rate clerk, and small business management.

h. Every possible effort should be made to build enrollment in the following existing engineering and industrial technologies: architectural technology, engineering technology, mechanical technology and climate control technology. A program in chemical technology should be added.

A restudy should be made of the demand for graduates, and if firm, increase efforts to recruit students or drop the program in the following: certificate programs in auto technology, power plant, and airframe; environmental control; construction technology; traffic engineering; electro-mechanical technology.

Certificate programs in climate control technology, mechanical technology, and electro-mechanical technology should be dropped.

A basic engineering technology program should be offered at one of the campuses. There is a continuing demand for well prepared technicians at both the industrial technician level and the engineering technician level. Employers reported having to recruit these personnel from outside the area just as they did in 1968. The MJCD should do an in-depth study on this matter and take action at once to remedy the situation.

i. Every effort should be exerted to build enrollment in the home economics program.

j. A program should be offered in agri-business, and explorations should be made concerning the development of a broadly based generalist program in agriculture technology (containing, for example, elements of ornamental horticulture, landscaping, drafting and design, soils, floriculture, silviculture, botany, general chemistry and other relevant fields).

k. The MJCD should explore working with the unions in the machine trades and construction trades to determine if they could provide the related science and such courses as human relations, supervision, estimating, etc.

l. Efforts should be made to articulate and dovetail program development at the community colleges with the programs developing in area vocational technical high schools of the region.

m. An associate degree program in general studies should be implemented.

n. An in-depth study should be made by MJCD in the public service occupations field to determine the magnitude and nature of the need for educational programs.

o. As facilities become available strong programs should develop in the fine and performing arts which themselves extend into the life of the community.

3. Student Personnel Services

a. Job placement and follow-up activities should be more fully developed at each college.

b. Considerable expansion is needed in the development of pre-college information aspects of the orientation programs at each college.

c. Developmental and remedial education, clinical and laboratory facilities and services need to be developed and more fully utilized in conjunction with vestibule programs.

d. A major change should be made in the function and role of professionally trained counselors at each college, so they can perform the level and nature of professional service commensurate with their professional training and background, which will result in a more effective and realistic guidance system.

An adequate ratio exists between the full-time equivalent number of counselors and students, but a major share of the counselor's time and effort is devoted presently to academic advisement (consulting with students on what courses they should enroll in next semester). This is a level of counseling which can be effectively provided by non-professionally trained faculty members throughout the colleges, each of whom may have a small group of students assigned to them for that purpose. We have heard all the excuses why this cannot be done, but we have also observed that such a system does work and can be most effective when counselors provide a leadership role with part of their time devoted to helping faculty do a more effective job of student program advisement. Faculty in occupational education fields should play a strong role in this effort. This change in emphasis would enable the counseling staff not only to do diagnostic work and levels of counseling involving career, personal, and educational decisions, but also function in the area of program selection and placement of students, and the coordination, articulation, and improvement of guidance system relationships with secondary schools, employers, and other educational institutions.

e. An open door admissions policy must not mean automatic admission to specific courses and programs. A strong and effective guidance and counseling system is needed to bring reality into the career counseling/educational advisement process, so that MJCD colleges cease to be primarily collegiate transfer institutions and begin to become community colleges with occupational education at the associate degree and certificate levels becoming a major function.

4. Community Educational Services

   a. Responsibility for developing a comprehensive program of community educational services should reside both at the college and district levels.

      (1) A fourth community college, a college without walls, should be established to extend educational opportunities through a variety of means to citizens throughout the district. This college would be the responsibility of a district coordinator of community services. The primary function would be to provide through and in cooperation with the colleges where ever possible, or in other instructional centers, educational extension services.

      (2) Each college, through the office of an administrator designated for the purpose, would be responsible for developing a comprehensive program of community educational services reflecting the needs and conditions of its primary service area. All extension activities (only one type of community educational service) would be coordinated through the office of District Coordinator of Community services.

      (3) A series of *ad hoc* citizens' committees or councils should be organized and utilized extensively in developing these programs.

5. Evaluation

   a. Continuing educational planning research and evaluative studies should be made by the district office with the cooperation and participation of appropriate persons at each college.

   b. Several of the questions emanating from the findings of this study to which answers should be obtained are:

      (1) What happens to the students who leave MJCD Colleges and transfer to a four-year college or university?

      (2) What is the relationship of attrition between the freshman and sophomore years and the program in which students are enrolled?

(3) Why do 3 percent of MJCD students expect to enroll in a technical or trade school after leaving?

(4) In what post-secondary school level educational programs not currently offered are 19 percent of MJCD students more interested than the one in which they are enrolled? They failed to indicate these in this study. In what programs are 11 percent of high school seniors interested who don't find them offered at MJCD?

(5) Why does one high school senior in ten think he should go somewhere other than MJCD to get a quality education?

(6) Why would one high school senior in ten not have enough information about MJCD to make a decision?

c. A thorough study should be made of the career guidance and educational advisement process at the MJCD colleges.

6. Access to College Services

a. The Metropolitan Junior College District should establish, by contract with an existing public transportation authority or otherwise, an inter-college bus system. This is necessary to facilitate the movement of more students from one part of the district to another who initially enroll at a college other than the one in greatest proximity to his residence, but it would also facilitate the movement after initial enrollment (which is extremely low now) of students from one college area to another.

7. Finance

a. The district should continue to utilize all forms of available financing methods to develop and operate the system.

b. Development of the MJCD system should be planned to obtain maximum federal aid for eligible construction.

c. Guidelines should be developed for the addition of programs and activities which are financially encouraged and funded from monies which may become available from federal government or philanthropic sources.

d. Student fee (tuition) charges should be evaluated in the light of current and future increases in operating costs. Fees (tuition) rates should be increased only after all other sources of financing have been exhausted. Any increase should be consistent with the open door admissions policy and take into account the economic status of residents and rates at other community colleges.

8. Physical Facility Development

a. After the year 1973-1974 plans should be made to sell the facility at 560 Westport Road, the fair market value of which is estimated at over a million dollars, and acquire either by lease or purchase at a location central and accessible to the colleges a space of approximately 20,000 square feet.

b. The space included in the new permanent Penn Valley college facility will be adequate to accommodate the numbers of students anticipated in the foreseeable future. However there is need for structural changes in the arrangement of existing interior space to accommodate instructional programs in art, secretarial training, and data processing now housed in the Westport facility. These programs and all offices should be moved just as soon as possible and without delay of even one year to the new facility. Separation is deleterious to program development, enrollments, faculty unity, coordination, and morale of students who perceive they are second class students. The Career Education Center programs, including dental laboratory technology, and the Veterans Education Center should be housed in the same facility as the rest of the college operation. It is estimated the necessary renovations of existing space to house all these programs would approximate $376,000.

Appropriate leased or rented space should be found to house the Early Childhood Education program in proximinity to the Penn Valley College campus.

A third level should be added to the parking structure even though utilization studies now indicate the facility is accommodating the need. One wonders where all the students who indicate they arrive by automobile are parking them. In the event the college utilization was less than maximum capacity, it would be a good public service in that location to contribute to the solution of the broader community problem of illegally parked motor vehicles by permitting controlled use of the facility by neighboring enterprises. The estimated cost of a third level is $700,000.

c. New permanent facilities should be constructed simultaneously at the suburban colleges as soon as possible. We have considered an alternative of developing these facilities in two phases of construction but believe sufficient economies can be achieved to warrent a single phase II plan.

(1) New permanent facilities should be constructed at Maple Woods College to accommodate 2,500 FTE day students. A total gross amount of square feet needed is 375,000 including the permanent space now being completed. A total of 347,000 square feet of new space will be needed. The cost of constructing this facility is estimated at approximately $15,268,000. Mechanical and utility systems should be provided with a capacity to ultimately service a facility after 1980 to accommodate a 4,000 FTE day enrollment.

(2) New permanent facilities should be constructed at Longview College to accommodate a day FTE enrollment of 3,500 FTE day students. A total gross amount of square feet needed is 525,000 square feet, including the new student center classroom facility now being completed. A total of approximately 495,000 square feet of new space will be needed. The approximated cost is $21,780,000. Mechanical and utility systems should be provided with a capacity to ultimately service a facility to accommodate a 4,500 FTE day enrollment.

(3) Distribution of projected space for accommodating the day FTE enrollments at the suburban colleges would be as follows:

Type of Space	Maple Woods	Longview
Administration	19,950	36,750
Library	16,575	30,450
Classrooms, Lecture and Office	82,462	151,200
Academic Laboratories	25,725	47,250
Technical Laboratories	47,588	87,150
Student & Academic Center	134,625	84,000
Theatre-Auditorium	13,687	25,200
Gymnasium	15,150	27,825
Guilding Services and Other	19,238	35,175
Total	375,000	525,000

d. Action should be taken without delay to provide for the construction of needed facilities. Around the year 1980, there should be a reassessment of needs for physical facility development in the light of developments and trends.

e. A second general obligation bond issue should be proposed for authorization during 1973-74 to provide for the construction of essential permanent facilities at each of the suburban colleges and to complete some additional construction at Penn Valley. The estimated amount necessary will be on the order of $38,124,000.

f. The authorization of a 5 cents per $100 assessed valuation in tax levy is necessary to provide the amount of general fund revenue for operating the MJCD colleges in the foreseeable future.

9. College - Community Relationships

a. In many ways and at many points the college should greatly improve its interface with the communities it serves.

(1) The Metropolitan Junior College District should assist high schools in the area to provide up-to-date information about careers and about its programs which prepare for those careers by supplying them with brochures and/or information folders relating to each occupational program. Such information materials have multiple uses.

(2) Professional couseling staff should devote part of their time interacting with groups of employers and students, counterparts in other educational institutions and community agencies concerned with manpower development.

(3) Regular and periodic efforts should be made to orient both non-professional employees and part-time instructors to the role, nature, progress, and accomplishments of the MJCD colleges.

(4) There should be effective and extensive utilization of _ad hoc_ lay advisory committees in the development of occupational education programs and community educational services.

(5) Follow-up contacts should be maintained with former students and employers of those who went to work after completing a program at an MJCD college to obtain constant feedback.

CHAPTER II

POPULATION, ECONOMIC, AND MANPOWER REQUIREMENT TRENDS

Part I - Population Trends

Introduction

Presented in this chapter are data on economic, demographic, and manpower trends in the Kansas City Metropolitan area most relevant to educational needs at the post-secondary level. The purpose is to reassess trends for changes and deviations which may have become apparent during the past five years that have implications for future growth and development of the Metropolitan Junior College Disrrict. More specifically the focus is upon patterns of change which will affect demand for educational service on the Metropolitan Junior College District rather than upon an analytical study of the major forces and processes that have shaped population growth in the area. Data in this chapter are presented in the form of an update of trends with extrapolations for the future. It is believed that these projections should serve as useful guidelines for future program and planning activity in the Metropolitan Junior College District.

Population Growth Trends

Shown in Table 1 are U.S. Bureau of the Census total population enumerations over the past thirty years for the present Kansas City Standard Metropolitan Statistical Area (SMSA), and subdivisions of the area. This area is composed of Johnson and Wyandotte Counties in Kansas and Jackson, Clay, Platte, and Cass Counties in Missouri. Both total population data and percentage change data for each decade 1940-1970 are shown in Table 1. Observing the data, one can see that the rate of population growth was considerably higher in the SMSA during the 1950's than during the 1960's. Furthermore the proportion of total SMSA population in the four-county Missouri portion has declined from about three-fourths in 1940 to slightly over two-thirds in 1970. In the Missouri portion of the

TABLE 1

TRENDS IN POPULATION CHANGE EACH DECADE 1940-1970[1]

Area	1940	Percent Change	1950	Percent Change	1960	Percent Change	1970[2]
Kansas City SMSA	720,039	17.9	848,655	28.7	1,092,545	15.0	1,256,312
Kansas portion	178,398	27.9	228,101	44.4	329,287	22.8	404,507
Kansas percent of SMSA	24.8	2.1	26.9	3.2	30.1	2.1	32.2
Clay Co., Mo.	30,417	48.7	45,221	93.4	87,474	41.4	123,702
Jackson Co., Mo.	477,828	13.2	541,035	15.1	622,732	5.0	654,178
Cass Co., Mo.	19,534	-1.0	19,325	53.7	29,702	40.9	41,844
Platte Co., Mo.	13,862	8.0	14,973	55.9	23,350	37.4	32,081
Missouri portion	541,641	14.6	620,554	23.0	763,258	11.6	851,805
Missouri percent of SMSA	75.2	-2.1	73.1	-3.2	69.9	-2.1	67.8

---

[1] U.S. Department of Commerce, Bureau of the Census, Census of Population, General Population Characteristics: Missouri, 1940, 1950, 1960, and 1970.

[2] Including corrections resulting from errors reported made in the tabulations of Census enumerations for Missouri and reported by the Bureau of the Census as an errata in General Population Characteristics: Missouri.

SMSA percent of population change in Jackson County has declined from a 15.1 percent increase during the 1950's to an increase of 5.0 percent during the 1960's. Greatest percent of population increase in the Missouri portion of the SMSA during the past twenty years has been evinced in Clay County followed in order by appreciably smaller increases in Platte, Cass and Jackson Counties. One can determine from the data that during the past three decades, total population in the four-county area of Missouri increased 57.3 percent, while total population in the Kansas City SMSA increased 74.5 percent.

Population growth rates in the Kansas City SMSA during the 1950's and the 1960's exceeded those recorded for the state. While the population in the total Kansas City SMSA grew slightly over three times as fast as the population in the Missouri portion of the SMSA during the former 1950-1960 decade, growth during the 1960-1970 decade was slightly less than twice as fast. Population in the Missouri portion of the Kansas City SMSA increased 11.6 percent during the 1960's, while the percentage increase for the state was 8.3 percent. During the past decade population growth in the total Kansas City SMSA compared with population change in Missouri during the 1960's and population change in the Missouri portion of the Kansas City SMSA during the 1950's, growth has slowed considerably.

Population growth patterns of the non-white population in the Kansas City Metropolitan area are shown in Table 2. The proportion of total non-white population in the Missouri portion of the Kansas City SMSA has been increasing over the past three decades from about two-thirds in 1950 to three-fourths in 1970. While total population in the Missouri portion of the Kansas City SMSA increased 11.6 percent as shown in Table 1 between 1960 and 1970, the increase of non-white population as a portion of non-white population in the Missouri portion of the Kansas City SMSA was 37.5 percent as shown in Table 2. Largest increases of non-white population were in Cass and Clay Counties. Except for Platte County where there was a small decline of 4.2 percent, the increase of non-white population was greater than the increase in percent of the total population.

TABLE 2

KANSAS CITY METROPOLITAN AREA NON-WHITE POPULATION GROWTH PATTERNS 1950-1970

Area	Number by Year[1]			Percent Distribution			Percent Change	
	1950	1960	1970	1950	1960	1970	50-60	60-70
Kansas City SMSA	88,541	119,049	158,033	100	100	100	34.5	32.7
Kansas Portion	30,204	32,295	38,786	34.1	27.1	24.5	6.9	20.0
Missouri Portion	58,337	86,754	119,247	65.9	72.9	75.5	48.7	37.5
Clay Co.	795	833	1,328	.9	.7	.8	4.8	59.4
Jackson Co.	57,033	85,211	116,960	64.4	71.6	74.0	49.4	37.3
Cass Co.	166	366	629	.2	.3	.4	120.5	71.9
Platte Co.	343	344	330	.4	.3	.2	.3	-4.2

[1] U.S. Bureau of the Census, U.S. Census of Population: 1960, General Population Characteristics, Missouri, Table 27 and U.S. Census of Population: 1970 General Population Characteristics, Missouri, Table 23.

Data showing shifts in population age composition are shown in Figure 1. There are several important findings, the most important of which is the decline in numbers of youth under age five. If this trend should continue during the next decade, it will have long term implications for facility development. Beginning in 1988 there will be a declining number of high school graduates, and unless the declining birth rate is offset by future immigration, and every other condition remains relatively constant there may very well be fewer students after the year 1988.

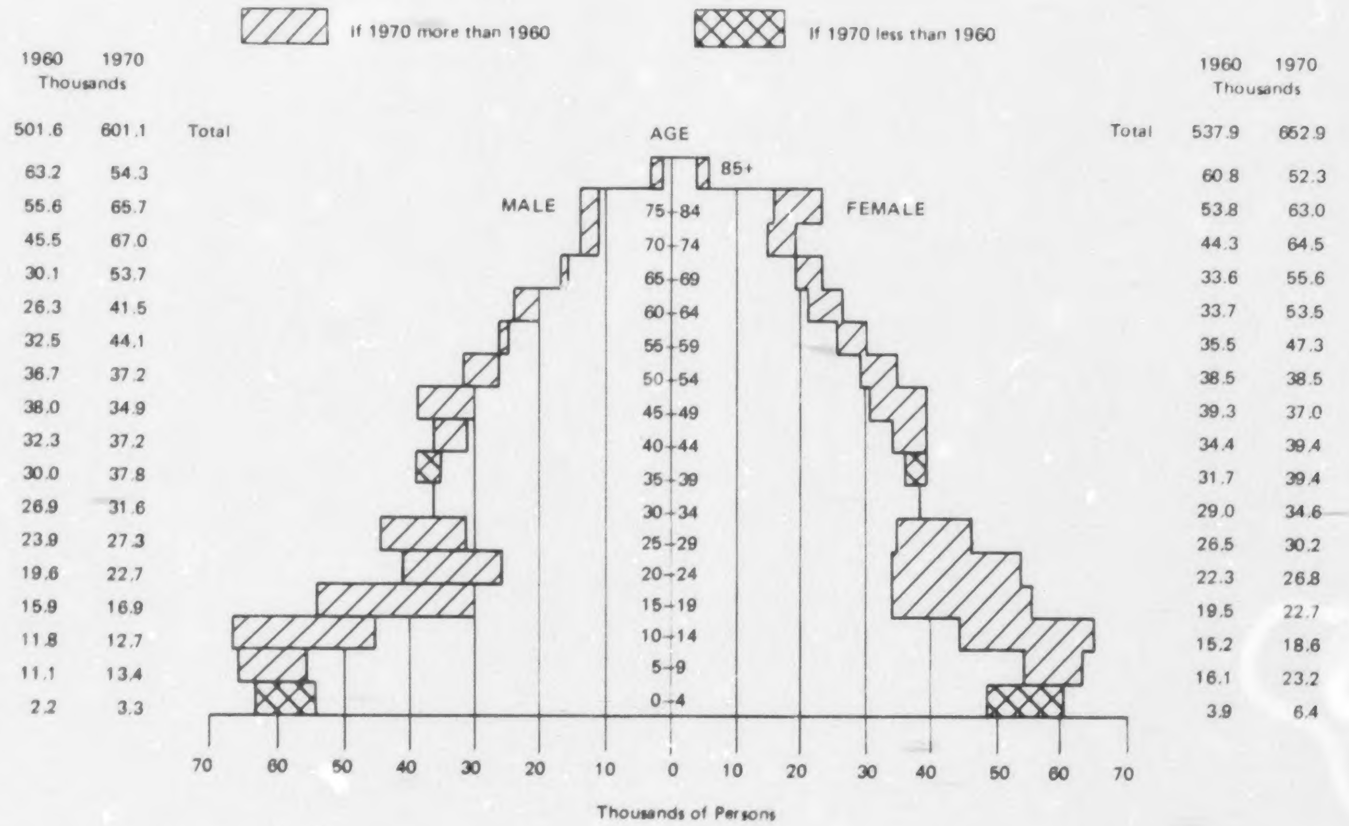
The decline in numbers of youth under age 5 is a factor currently being encountered everywhere, and this fact poses difficulty in making projections to 1990 and beyond. The birth rate is now at its lowest point in this century but even if it stays at this low point one cannot infer that population growth will not occur. Persons now the parents of young children (ten and under) were, for the most part, born between 1938 and 1953. Although the latter part of this era evidenced a high birth rate, the period from 1938 to 1946 produced relatively few children. Consequently, in the early 1970's there are the compound effects of two factors: (1) A low birth rate because of conscious choice to limit the size of families, and (2) a relatively low rate of family formation. However, beginning about 1975 the rate of family formation will be affected by the high birth rates of the years from 1950 to 1968. Even though a low fertility rate prevails, the actual number of children born is likely to increase markedly each year from 1976 on through to 1985. Beyond that, valid predictions are difficult.

Data in Figure 1, reveal that in 1970 there was a considerably larger number of persons age 10-29 in the Kansas City SMSA than in 1960. The educational implication of this fact is that throughout the 1970's and most of the 1980's there will be an increase in the number of young adults and mature adults reaching age 25 and over--the age at which many adults desire to upgrade job skills or to train for another vocation. The potential for enrollment from working adults should greatly expand in the years ahead.

The trend toward increasing numbers of adult citizens in the population in the Kansas City area was manifest throughout the State of Missouri. A study of school enrollment trends in the fiscal year 1971 indicated the largest decrease in elementary school enrollments was in kindergarten and that a comparable pattern prevailed during 1972.[1] There was a decrease in 49 Missouri counties representing 70 percent of the state's enrollment. There was a decline in number of live births reported in Missouri in 1972. In the 1971 fiscal year, kindergarten enrollments decreased 2.8, 2.2, and .5 percent in Jackson, Cass, and Clay Counties, respectively, in Platte County there was a 2.3 percent increase in kindergarten enrollment.

---

[1] State Department of Education, Statistical Study of Enrollment in Missouri's Public Elementary Schools in Fiscal Year, 1971, Jefferson City, 1972 (mimeographed).



Source: U.S. Department of Commerce, Bureau of the Census, *1960 Census of Population: General Population Characteristics, Missouri*, Table 27 and *1970 Census of Population: General Population Characteristics, Missouri*, Table 24.

FIGURE 1 POPULATION OF THE KANSAS CITY STANDARD METROPOLITAN STATISTICAL AREA 1960 AND 1970

BEST COPY AVAILABLE

Population in the Metropolitan Junior College District

Total population in the MJCD was 656,318 in 1970.[1] This was 77 percent of the population in the Missouri portion of the Kansas City SMSA. Of the MJCD population, 56.4 percent resided in the Kansas City, Missouri public school district; 13.1 percent resided in the north Kansas City school district; and 30.5 percent resided in six remaining public school districts. Fifteen percent of the population of Jackson County is not now incorporated within the Metropolitan Junior College District.

Population Distribution

For planning purposes it is important to know the way in which population is distributed and the direction of population change. The percentage change in population by township between 1960 and 1970 is shown in Table 3. Also shown is the number of non-white residents of each township and the percentage distribution they comprised of the total population in 1960 and 1970.

Areas of largest growth in Cass County were the Townships of Raymore, West Peculiar, Big Creek and Mount Pleasant. Population declined in Everett and Polk Townships. The largest growth in Clay County was in Washington Township. In Jackson County growth was largest in the Townships of Washington, Brooking, and Blue. Greatest growth in Platte County was in May and Pettis Townships while Lee Township lost nearly a fourth of its population.

A comprehensive study of anticipated needs for future transportation facilities in the greater Kansas City Metropolitan area by the Kansas City Area Transit Authority revealed no evidence that there would be any drastic changes in either employment or population distribution until sometime beyond 1975.[2] Neither did this study discern an indication that the rate of general in-migration and population growth of the Kansas City Metropolitan area would accelerate. Present trends of population distribution and growth were expected to continue gradually with little diversion experienced from the existing land use base.

The tendency of apartment construction along major arterial streets and urban highways, with particular emphasis on suburban locations, is expected to continue. The completion and location of the Kansas City International Airport will probably induce more rapid housing development in Clay and Platte Counties than is likely to occur elsewhere in the

---

[1] Data and Information Systems Center, Inc., 1970 Population Report for the Junior College District of Metropolitan Kansas City, Missouri (mimeographed).

[2] Kansas City Area Transportation Authority, Mid-America Regional Council, Transit Improvement Plan, November, 1972, pp. 16-20.

TABLE 3

BEST COPY AVAILABLE

PERCENT POPULATION CHANGE BY TOWNSHIP 1960-1970 AND DISTRIBUTION OF NON-WHITE POPULATION

County and Township	Total Population		Percent Pop. Change	Non-White Population Number		Non-White Population Percent	
	1960	1970	1960-70	1960	1970	1960	1970
Cass	29,702	41,844	40.9	366	629	1.2	1.6
Austin	1,053	1,189	12.9	1	--	.1	--
Big Creek	603	1,053	74.6	3	2	.3	.2
Camp Branch	1,249	1,496	19.8	--	5	--	.3
Coldwater	876	941	7.4	--	1	--	.1
Dayton	475	512	7.8	--	6	--	1.2
Dolan	847	1,102	30.1	--	--	--	--
Everett	419	357	-17.4	--	--	--	--
Grand River	4,648	6,075	30.7	76	74	1.6	1.2
Index	902	968	7.3	--	1	--	.1
Mount Pleasant	9,715	15,643	61.0	223	462	2.3	3.0
Peculiar	806	1,107	37.3	--	8	--	.7
Pleasant Hill	3,205	3,931	22.7	59	40	1.8	1.0
Polk	1,135	1,050	-8.1	2	1	.2	.1
Raymore	960	2,471	157.4	1	21	.1	.8
Sherman	646	686	6.2	--	--	--	--
Union	784	989	26.1	--	3	--	.3
West Dolan	377	422	11.9	--	--	--	--
West Peculiar	1,002	1,851	84.7	1	5	.1	.3
Clay	87,474	123,702	41.4	833	1,328	1.0	1.1
Chouteau	--	29,825	--	--	125	--	.4
Fishing River	8,825	10,345	17.2	266	459	3.0	4.4
Gallatin	60,438	58,190	-3.9	76	298	.1	.5
Kearney	1,906	2,407	26.3	1	4	.1	.2
Liberty	12,265	17,109	39.5	486	439	4.0	2.6
Platte	3,084	3,915	26.9	2	3	.1	.1
Washington	956	1,911	99.9	2	--	.2	--
Jackson	622,732	654,558	5.1	85,211	116,960	13.7	17.9
Blue	90,890	186,127	104.8	848	30,081	.9	16.2
Brooking	28,418	63,938	125.0	16	9,645	.1	15.1
Fort Osage	3,390	4,193	23.7	2	13	.1	.3
Kaw	440,371	276,992	-59.0	84,138	76,248	19.1	27.5
Prairie	12,557	18,369	46.3	149	68	1.2	.4
Sin-A-Bar	8,928	15,244	70.7	8	58	.1	.4
Van Buren	3,112	3,602	15.7	4	26	.1	.7
Washington	35,066	85,713	144.4	46	821	.1	1.0
Platte	23,350	32,081	37.4	344	300	1.5	1.0
Carroll	2,182	2,692	23.4	64	52	2.9	1.9
Fair	641	699	9.0	0	1	--	.1
Green	1,546	1,698	9.8	7	5	.5	.3
Lee	677	543	-24.7	89	--	13.1	--
Marshall	1,059	107	1.5	1	2	.1	.2
May	2,048	3,560	73.8	6	15	.3	.4
Pettis	12,002	18,478	53.9	159	235	1.3	1.3
Preston	1,087	1,150	5.8	1	2	.1	.2
Waldron	379	399	5.3	7	6	1.8	1.5
Weston	1,729	1,787	3.3	10	12	.6	.7

suburban belt of the Kansas City, Missouri portion of the SMSA. Prime locations for which developmental planning is underway are along I-29 to the airport, US 169 to Nashua, I-35 to Liberty, elements of US 71 bypass between Liberty and the airport, and elements of State route 152 between location of the Maple Woods Community College campus of the Metropolitan Junior College District and route I-29. High density residential developments are expected to occur in these corridors during the next 15 to 20 year period.

High intensity residential development may also occur along route I-435 in Jackson County as well as several locations along US 71 bypass in the area of Lee's Summit and east of Raytown. Continued apartment construction may be expected within developed sections of the metropolitan area in the Broadway-Country Club corridor, although an accelerated rate of development should not occur. The Area Transportation Authority concluded that adjustments in transportation routes should relate directly to the existing population distribution pattern until approximately 1977-79 when new trends in the evolving growth pattern should become apparent. Population distributions in the Kansas City region for 1970 and possible distribution by 1990 are shown in Figures 2 and 3.[1] (A more recent population distribution map prepared for the year 2000 shows essentially the same pattern and is not included here.) These Figures indicate that growth is expected throughout the entire suburban area with heaviest concentrations to the north in proximity to the new Kansas City International Airport location and to the southeast.

Projections of Total Kansas City Metropolitan Area Population

Over time, several population projections have been made for the Kansas City Metropolitan area as presented in Table 4. Our purpose of examining projections made in earlier years is to illustrate an important deviation between them and more recent population statistics based upon later benchmarks of change. Earlier projections were more optimistic about population growth than recent projections. For example, the 1980 projection of population made in 1967 by the City Planning Department which approximates a total of 1,892,500 residents is a third (33.2 percent) higher than the 1973 projection of 1,421,200 by the Mid-America Regional Council (MARC). This projection also is 28.7 percent higher than the revised projection made in 1970 by the National Planning Association. The 1990 projection of 2,473,500 residents is about 30 percent higher than the MARC projection for the year 2000.

The most recent population projection undertaken by MARC reflects what the agency considers to be a realistic rate of growth in view of past trends and recent developments in the Kansas City Metropolitan area population distribution. This projection provides estimates of both inside and outside cordon rings within the Kansas City SMSA. The cordon line, established by MARC, the State Highway Departments of Missouri and Kansas, and the Federal Highway Administration, is a boundary representing the anticipated extent of urbanization by the year 2000. The inside cordon area is bounded roughly by Belton and Olathe on the south, Platte City and Smithville on the north, Bonner Springs and Leavenworth on the west, and Liberty and Blue Springs on the east.

---

[1] Reproduced from Kansas City Area Transportation Authority, Mid-America Regional Council, pp. 13 and 19.

BEST COPY AVAILABLE

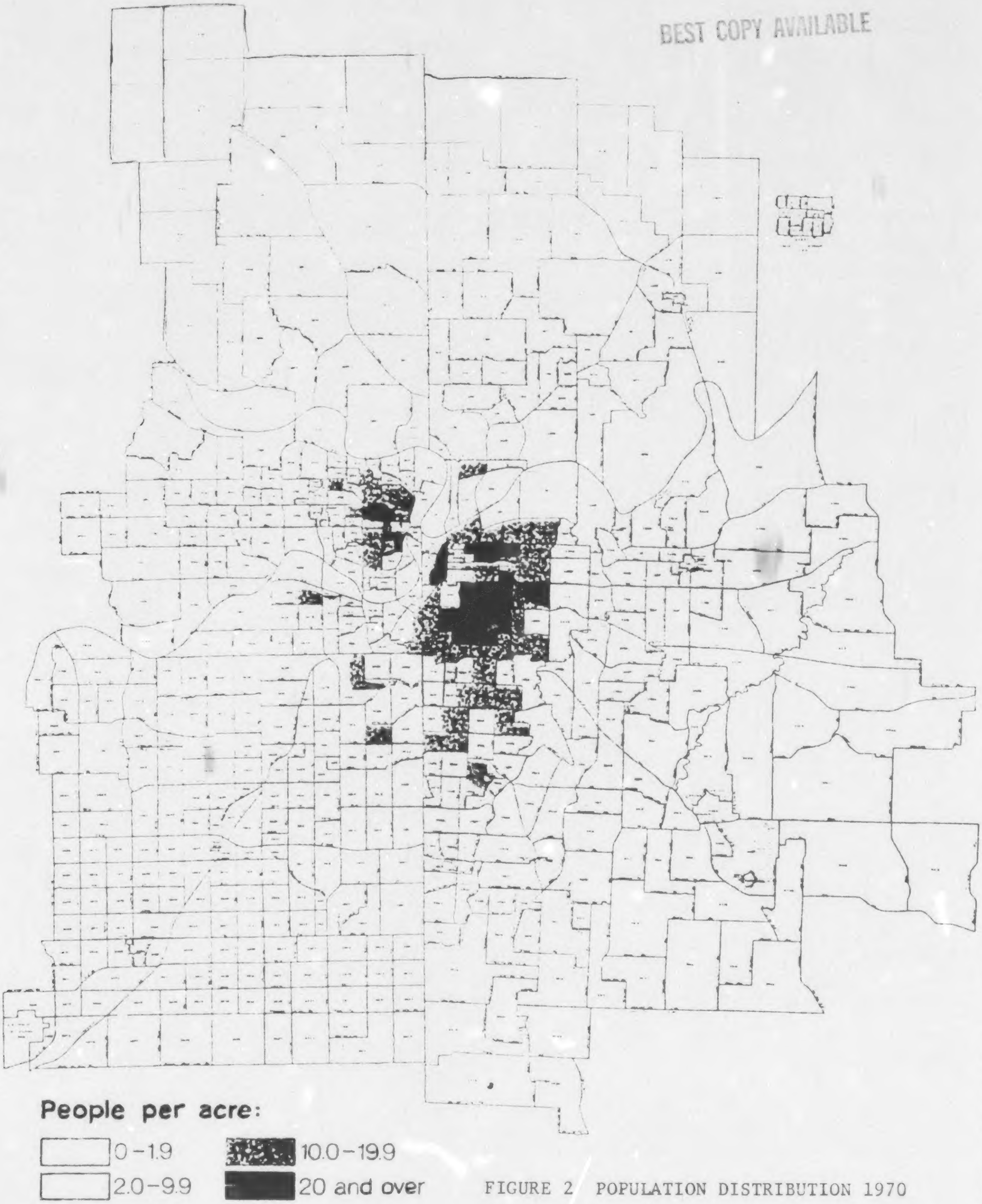

People per acre:
0-1.9
2.0-9.9
10.0-19.9
20 and over

FIGURE 2 POPULATION DISTRIBUTION 1970

BEST COPY AVAILABLE

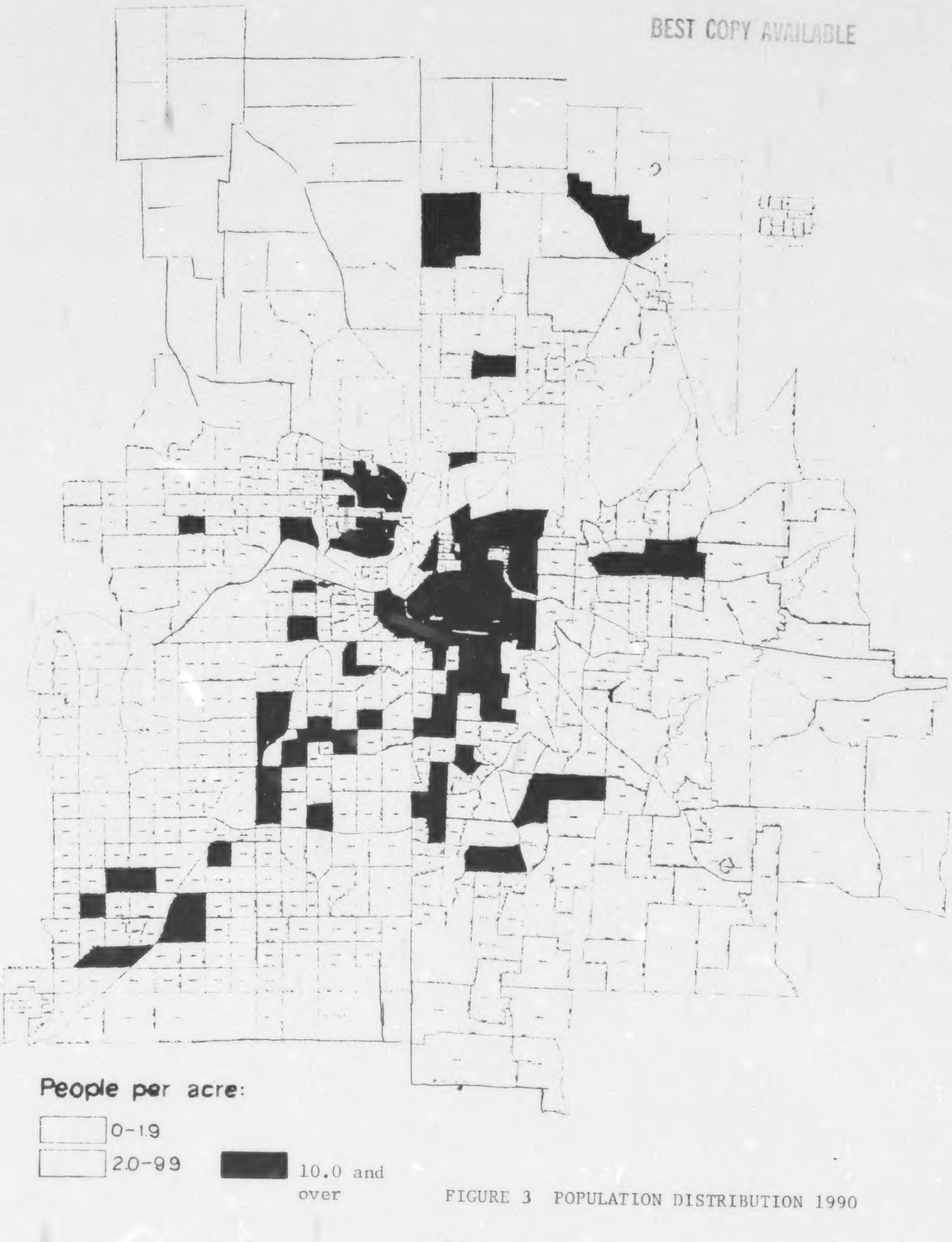

People per acre:
0-1.9
2.0-9.9
10.0 and over

FIGURE 3 POPULATION DISTRIBUTION 1990

BEST COPY AVAILABLE

TABLE 4

TOTAL RESIDENT POPULATION PROJECTIONS FOR THE KANSAS CITY STANDARD METROPOLITAN STATISTICAL AREA
(In Thousands)

Year	CPD-KC[1]	Rand[2]	NPA Total SMSA[3]	Mid-America Regional Council[4]						
				Inside Cordon		Outside Cordon		In Cord.	Out Cord.	Total SMSA
				Kan.	Mo.	Kan.	Mo.	In	Out	Kan. & Mo.
1970	--	1,310.1	--	394.3	796.6	12.7	52.8	1,190.9	65.4	1,256.3
1975	1,521.2	1,474.4	1,357.0	--	--	--	--	--	--	1,420.8
1980	1,892.5	1,662.4	1,470.5	460.5	883.4	15.7	61.7	1,343.9	77.3	1,421.2
1985	2,140.1	1,870.4	--	--	--	--	--	--	---	1,727.3
1990	2,473.5	--	--	--	--	--	--	--	---	--
2000	--	--	--	644.7	1,153.4	20.2	87.9	1,798.1	108.2	1,906.3

[1] City Planning Department, Kansas City, Missouri, "Population Estimates - July 1, 1967 and Land Area in Square Miles" (July 1, 1967).

[2] Metropolitan Populations to 1985: Trial Projections, RAND Corporation Memorandum, RM-4125-RC (Santa Monica, California: The RAND Corporation, September 1964), p. 14.

[3] National Planning Association, Center for Economic Projections, Regional Economic Projections Series, Metropolitan Area Growth Patterns for the Coming Decade, Report No. 70-R-2 (Washington, D.C.: The Association, December, 1970), p. S-6.

[4] Mid-America Regional Council, Small Area Population Projections for KCMR (Kansas City, Missouri: The Council, January, 1973), pp. 4-14.

Based on data that we have gathered as well as an examination of assumptions that have been used by MARC in population projections, we believe that MARC projections represent a realistic, but conservative, population data base. In addition to incorporating all known planned and initiated activities in the projections, several basic assumptions were used by MARC such as the following:

1. A rapid transit system will not be developed prior to the year 2,000.

2. All land designated as open space, steep sloped and floodplain is undesirable for residential development unless there is an initiated development on it.

3. Rate of population decline in the central city area of Kansas City, Missouri will continue to the same degree as during the 1960's until 1980 unless there are

initiated and planned construction developments. The most substantial decrease of population continues to occur in the area bounded by 55th street on the south, the Blue River on the east, the Missouri River on the north and the State Line on the west. Most of the loss, about 47,000 residents, is expected to occur before the year 1980. Loss of population in this area is estimated to diminish to 20,000 between 1980 and 2000 due to assumed public and private actions to offset existing trends. These actions are expected to be uncoordinated and sporadic.

4. Residential sprawl is partially controlled both by logical focal points for business organizations, public service organizations, residential concentrations, and other community facilities and by the use of planned utilities such as water lines, sewer lines and freeways. It was assumed that future utilities are planned in such a way that undesirable urban growth patterns are not encouraged.

Population projections issued by the National Planning Association take into account such factors as demographic and economic trends and factors which have impact on the Kansas City SMSA in the larger region of which it is a part. Growth rates relative to SMSA population, employment, personal income, and per capita personal income which have close interdependency in their relationship to growth have been considered. Industrial mix of noncommodity and manufacturing activities, geographical location, and trends relative to the proportion of localized industrial employment devoted to products sold outside the area and, in some cases, commuting patterns are also factors considered.

It is logical that the influence of interdependent economic and demographic factors operating in the mid-west region and the Nation which impact upon the Kansas City SMSA are reflected more adequately by NPA in their projections than is true of other projections. On the other hand, local projections are valuable insofar as they more adequately reflect growth factors specific to the area such as initiated and planned developments, topological features of the geographical area, and pace of development for utilities and traffic systems. Neither projection methodology can possibly reflect an unforseen national catastrophe or windfall. We believe it is realistic that the population estimates of 1,388,900 in 1975 and 1,445,800 in 1980 are adequate approximations for planning purposes.

Projected Population Distribution and Age Composition

As indicated by the dot maps presented as Figures 2 and 3, most population growth is expected to occur in the suburban growth areas of Clay and eastern Jackson Counties and the newly urbanizing areas of Platte and Cass Counties. A continued shift of population is expected away from the central city area of Kansas City, Missouri. As indicated above, the most substantial decrease in population is expected in the central city area of Jackson County.

Projected county growth patterns in the Kansas City Metropolitan Region indicate that population in Cass, Jackson, Clay, and Platte Counties will continue to decline as a proportion of the total population in the Region. This does not mean there will not be growth, for all counties are growing in absolute terms. All counties except Platte are projected to grow at relatively stable rates between the years 1970 and 2000. Percents of population increase between 1970-1980 and 1970-2000 are shown below:

	1970-80	1970-2000
Cass	23.9%	94.0%
Clay	30.1	125.7
Jackson	3.1	19.6
Platte	49.6	221.9

The high rate of growth in Platte County is expected due to its expected urbanization influenced primarily by the development of the Kansas City International Airport. Between the years 1970 and 2000, the growth in Platte County is expected to result in an increase of 71,185 persons. The next largest percentage increase in Cass County is expected to result in an increase of 37,081 persons. Clay County is expected to increase by 155,505 persons by the year 2000 and an increase of 128,146 persons is expected in Jackson County.[1]

Projections of the population by age composition in the Kansas City Metropolitan Region indicate that between the years 1970-2000, there will be 35.4 percent increase in absolute numbers of youth age 0-19. During the same period, numbers of persons age 20-29 are expected to increase by 51.9 percent, and the percent of persons age 30-39 is expected to increase by 63.2 percent.

In 1970, persons age 19 and under constituted 37.8 percent of the total population in the Kansas City Metropolitan Region. In 1980 this segment of total population is projected to constitute 34.6 percent of the total population and in the year 2000 only 34.0 percent. Persons age 20-39 are expected to increase as a percentage of total population in the Region from 26.8 percent in 1970 to 30.2 percent in 1980, 30.4 percent in 1990, and 28.1 percent in 2000. The same pattern of change is expected for persons age 20-29 as a proportion of total population. Clearly, trends derived from population projections over the next 20 and 30 years reveal that while persons age 19 and under are expected to constitute a declining proportion of the total population, their absolute numbers are expected to increase over a third throughout the entire Region. Both in absolute numbers and as a percentage of total population significant increases are expected for the 20-29 and 30-39 age groups. These trends for the Region may be expected to be reflected in the Metropolitan Junior College District portion of the area.

---

[1] Mid-America Regional Council, "Small Area Projections Kansas City Metropolitan Region 1970-2000," (Unpublished Preliminary Draft), May, 1973.

Updated population projections to the year 2000 were completed by the Mid-America Regional Council by origin-destination (O-D) zone during the course of this study. These data were made available in unpublished form to ADL staff. An analysis of these projections indicated that total population growth within the Metropolitan Junior College District part of the North Kansas City School District is expected to be 104 percent between the years 1970 and 2000. While the total population within the Metropolitan Junior College District part of Lee's Summit, Hickman Mills, Grandview, and Belton is expected to increase approximately 102 percent between the years 1970 and 2000, the total population in Lee's Summit is expected to increase nearly 200 percent. Total population in the Metropolitan Junior College District part of Center and Raytown is expected to increase by 34 percent between the years 1970 and 2000.

If population projections materialize within the present Metropolitan Junior College District as anticipated, the rate of total population growth in the areas served by Maple Woods and Longview Colleges is expected to be about the same with a slightly higher percentage increase around Maple Woods College. However, the total numbers of persons residing in the area served primarily by Longview College is expected to be greater than in the area served primarily by Maple Woods College. If a rapid transit system serving the North Kansas City area should develop in the years prior to 2000, for example, during the early 1980's population growth in the area to the north would undoubtedly be accelerated. Population projections are in the process of preparation based upon assumptions that there would be a rapid transit system developed before the year 2000. With pressures building up for reduced use of automobiles in core city congested areas some planners predict a relatively rapid switch in metropolitan areas to rapid transit systems.

Sociological Characteristics of the Population

In 1970, there were 1,256,312 persons residing in the Kansas City Standard Metropolitan statistical area. Two-thirds (67.7 percent) resided in Missouri, and as shown in Table 5, 98.4 percent were born in this country. In the Missouri portion of the SMSA, 24.8 percent of all persons five years of age and over were living in the same county in 1970 as they did in 1965. The national percentage was 23.3 percent. In the Missouri portion, 70.6 percent of the workers were employed in the same county where they lived compared to 44.8 percent of workers living in the Kansas portion. Many Kansas residents apparently commute to work from outside their county of residence; it is anticipated that many commute to Missouri. About half of all male residents (49.7 percent) in the Kansas City SMSA were veterans of military service.

In the Missouri portion of the SMSA, 80.9 and 48.0 percent, respectively, of the men and women over age 16 were in the labor force, while in Kansas the percentages were 82.9 and 44.7, respectively. The mean family size was 3.5 persons in the SMSA.

TABLE 5

CHARACTERISTICS OF THE POPULATION IN THE KANSAS CITY SMSA

Population Characteristics	Kansas Portion SMSA	Missouri Portion SMSA	Total SMSA
Total population	404,507	851,805	1,256,312
Percent native	98.4	98.4	98.4
Percent born in different state	48.0	30.7	36.3
Percent living in the same county in 1970 as did so in 1965	22.1	24.8	23.9
Percent of workers working in county of residence	44.8	70.6	62.6
Percent Male over Age 16 with veteran status	50.4	49.4	49.7
Percent male over age 16 in labor force	82.9	80.9	81.5
Percent female over age 16 in labor force	44.7	48.0	47.0
Mean family size	3.56	3.47	3.50

[1] U.S. Department of Commerce, Bureau of the Census, General Social and Economic Characteristics: Missouri, pp. 282; 286; 298.

Shown in Table 6 are data on the educational characteristics of the population in the Kansas City SMSA compared to data for the Nation as a whole. In 1970, a higher percentage of the residents age 3-34 in school were in college in the Nation than in the Kansas City area. Also a larger proportion of the total population in the nation was in college per 1,000 total population than was true for the Kansas City SMSA. However in the

TABLE 6

EDUCATIONAL STATUS OF POPULATION IN THE KANSAS CITY SMSA[1]

Level of Education	USA	Kansas Portion	Missouri Portion	Total SMSA
Percent in college*	11.9	8.3	9.3	8.9
Number per 1000 population in college	34.0	26.0	26.0	26.0
Percent public college	66.4	69.2	66.6	67.5
Males 25 years and over				
1-3 years of college (%)	10.7	14.2	12.1	12.8
4 years or more (%)	6.8	11.6	6.4	8.1
5 years or more (%)	6.7	9.4	5.6	6.8
Median school years completed (number)	12.1	12.5	12.2	12.3
Females 25 years & over				
1-3 years of college (%)	10.5	14.8	11.5	12.5
4 years or more (%)	5.4	8.2	5.0	6.0
5 years or more (%)	2.7	3.2	2.4	2.7
Median school years completed (number)	12.1	12.4	12.2	12.3
Percent of all persons age 25 and over with 4 years or more of college	10.7	15.9	9.6	11.6

---

[1] U.S. Department of Commerce, Bureau of Commerce, General Social and Economic Characteristics: Missouri, p. 290 and United States Summary, p. 386.

*Percent of population age 3-34.

Kansas City area a higher percentage of both men and women had completed some college or had graduated from college than was true for the country as a whole. The median number of school years completed by all persons age 25 and over was 12.3 in the Kansas City area compared with 12.1 for the nation. The education level of the population in the Kansas portion was higher than for residents of the Missouri part of the SMSA. While for the entire Kansas City SMSA, the level of education in 1970 was higher than for the Nation, this picture could change over time if the number of college students generated per 1,000 population in the rest of the country remains above that of the Kansas City area.

Shown in Table 7 are data on the economic characteristics of the population in the Kansas City Metropolitan area and the nation as a whole. Observing the data one can see that a higher percentage of residents in the area have higher annual salaries than is the case for the nation's total population. A higher percentage of residents in the Kansas area have more income and a smaller percentage have lower incomes than residents in the Missouri part of the area. Median and mean income levels for families per family member, and for unrelated individuals, were higher in the Kansas City SMSA than for the nation. The percentage of families receiving public assistance and at or near the poverty income level was considerably smaller for the Kansas City area than for the nation. Relatively, these data reflect a wholesome economic status of residents in the area.

TABLE 7

ECONOMIC STATUS OF RESIDENTS IN THE KANSAS CITY SMSA[1]

Economic Status	USA	Kansas Portion SMSA	Missouri Portion SMSA	Total SMSA
Amount of family income				
Less than $5,000	20.3	12.2	15.4	14.4
$5,000-$9,999	32.5	28.9	32.8	31.5
$10,000-$14,999	26.6	30.7	31.2	31.1
$15,000-$24,999	16.0	20.8	16.7	18.1
$25,000-$49,999	3.8	6.2	3.0	4.1
$50,000 or more	.7	1.2	.1	.8
Median family income (000)	$9.6	$11.3	$10.2	$10.6
Mean family income (000)	$11.0	$13.1	$11.4	$11.9
Mean income per family member (000)	$3.1	$3.7	$3.3	$3.4
Median income per unrelated individual (000)	$2.5	$3.2	$3.2	$3.2
Mean income per unrelated individual (000)	$3.9	$4.5	$4.3	$4.4
Percent families below poverty level	10.7	6.0	7.3	6.9
Percent families less than 75% of poverty level	7.0	4.1	4.9	4.6
Percent families less than 25% over poverty level	15.0	8.7	10.6	10.0
Percent families receiving public assistance	5.3	3.4	3.5	3.4

---

[1] U.S. Department of Commerce, Bureau of the Census: Missouri, General Social and Economic Characteristics, pp. 314; 318; and United States Summary, pp. 398; 400.

Part II - Economic Growth Trends

Introduction

The purpose of this part of the study was to focus upon trends in the economy which have implications for manpower requirements. A review has been made of past and current trends, and attention is focused primarily on detection of ways in which recent developments have deviated from earlier projections. We examined several projections and extrapolated to 1980 requirements in each major occupational and industrial classification.

Trends in Industrial Mix

Between 1965 and January, 1973, total nonagricultural employment increased 24.7 percent in the Kansas City SMSA. This increase represented 85,900 jobs. Data showing trends in numbers employed are presented in Table 8. Mining industries continued a gradual declining trend. A slow steady growth of 7.7 percent in the transportation, communications and utilities sector of the economy continued a long-term trend at a slightly increased rate. Wholesale and retail trade also continued a long-term increasing trend of 22.6 percent compared to a growth rate of 17.5 percent over the eight year period ending in 1966. Employment in manufacturing peaked in 1969, then declined. Over the eight year period 1965 to 1973 the net increase was [illegible].8 percent; a figure representing 6,700 jobs. This was a marked decline from the growth rate of 27.2 percent evinced between 1958 and 1966. Employment in contract construction declined steadily between 1965 and 1970 when there was an upswing. The net percent decline in this industry was about 2 percent compared to a growth of 11.6 percent over the 8-year period 1958 to 1966. Employment in the finance, insurance and real estate sectors of the economy continued a long-term growth trend with an increase of 18.6 percent--about 1 percent under the rate for the previous years. Employment growth in the services and government sectors of the economy rose by 34.5 and 42.8 percent, respectively, thus continuing a long-term trend with employment in government which has been accelerating considerably over previous years.

An analysis of employment trends in manufacturing revealed, that between 1966 and 1970, a sharp decrease occurred (56 percent) in the manufacture of durable goods, as compared to a decline of 21.7 for nondurable goods. The long-term trend of decline in the manufacture of furniture and wood products continued. There was a decline of 29.3 percent in the manufacture of nonelectrical machinery and a decline of 6.5 percent in the manufacture of electrical machinery. This decline reversed a long-term trend of considerable growth. Employment in the manufacture of transportation equipment declined 7.7 percent. A slight increase of 10 percent in the manufacture of primary and fabricated metals was offset by a marked decline of 71 percent in the manufacture of other durable goods such as instruments, ordnance and accessories, and other miscellaneous products. The long-term trend of decline in the manufacture of food and kindred products coupled with a decline of 17.4 percent in the production of chemicals and allied products accounted for most of the decrease of employment in the manufacture of nondurable

TABLE 8

EMPLOYMENT TRENDS IN NONAGRICULTURAL EMPLOYMENT IN THE KANSAS CITY SMSA

Major Industrial	Actual Numbers by Year						Projections	
Classification	1965[1]	1967[1]	1969[2]	1970[2]	1972[3]	1973[4]	1975[1]	1975[5]
Total Non-agricultural employment	446.3	479.0	512.3	508.4	516.7	532.2	550.5	528.0
Mining	.6	.6	.6	.5	.4	.4	.8	.8
Contract construction	26.1	24.5	23.4	21.0	24.3	25.6	31.8	38.4
Manufacturing	115.5	130.4	131.8	126.3	118.8	122.2	145.3	125.0
Durable goods	66.2	77.1	77.8	73.0	NA	NA	86.9	NA
Nondurable goods	49.3	53.3	54.0	53.3	NA	NA	58.4	NA
Transportation, communication, electric, gas and sanitary services	45.5	48.3	50.7	51.4	48.7	49.0	50.0	42.7
Wholesale & retail trade	109.2	114.2	125.3	125.0	128.3	133.9	125.4	121.9
Finance, Insurance & real estate	29.1	30.4	32.0	32.4	33.5	34.5	33.9	42.9
Services	63.3	68.7	79.0	80.9	83.1	85.2	83.7	87.5
Government	57.0	61.9	69.2	70.9	79.6	81.4	79.6	68.8

[1] Arthur D. Little, Inc. A Development Program for Metropolitan Junior College-Kansas City, Volume III, May, 1968, p 4.

[2] U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, States and Areas 1939-1970, pp. 321-23.

[3] U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, XVII (May, 1972), pp. 74-5. (Data for March, 1972.)

[4] U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, XIX (March, 1973), pp. 72-73. (Data for January, 1973.)

[5] National Planning Association, Center for Economic Projections, Economic and Demographic Projections for Two Hundred and Twenty-four Metropolitan areas, Industry Employment in 224 Metropolitan areas, Volume I, Regional Economic Projections Series, Report No. 67-R-1 (Washington, D.C.: National Planning Association, May, 1967).

goods. Increases were observed in the printing and publishing business, the production of textiles, apparel, and related products and the manufacture of other miscellaneous nondurable goods.

Three trends which evolved after 1967 accounted for the greatest deviations from expected developments in the economy. The decline in contract construction is probably a short-term phenonomen due largely to multiple labor disputes during 1969 and 1970 which disrupted the entire industry. Employment in this industry may be expected to revive along earlier trend lines due to the need for completion of existing projects and commencement of work on new building projects. Declines in manufacturing were due to a general slowdown in business activity in the Kansas City SMSA and in the whole nation. Defense and allied plants decreased employment of workers in response to the reduced Vietnam war. The combined effects of labor disputes and the slowdown of the general economy have been reflected in reduced manpower needs. Even with declines in the manufacture of certain types of durable goods during the late 1960's and early 1970's, there was a greater net increase in number of persons employed in the manufacture of durable as compared to nondurable goods.

A third trend showing marked deviation from expected economic developments is the rapid increase in government employment. A major share of this increase is due primarily to increased public school employment and employment in the Metropolitan Junior College District. Increases in the service industries have been partially due to increases in hospital employment. There have been increases in trade employment resulting from the development of shopping centers in outlying suburban areas.

In the agriculture, forestry and fisheries industries, a long-term trend of decline in numbers employed continued and this trend is expected to continue throughout the decade.

Structural Shift Trends in Employment

Shown in Table 9 are sector classifications of the nonagricultural industries by the percent which each classification was of total employment for each of several years. Observation of these data reveal broad structural shifts in the area's economy in terms of the relative proportion of employment represented in specific sectors. Shown also are projections made earlier for the year 1975.

Following a period of gradual decline in the wholesale and retail sector of the area's total nonagricultural employment from 1958 to 1967, there has been a gradual proportional increase back to approximately the 1960 level. What earlier appeared as a definite shift in structural composition of the area's economy has been reversed. The steady increase in numbers employed in this sector as shown in Table 8 would appear to lead to a conclusion that the apparent earlier shift was partially due to the relative increase of employment in manufacturing at the time of this study. It appears that there is a definite shift in the relative proportion of persons employed in the manufacturing sector of the economy in comparision to nonmanufacturing industries. Within the manufacturing sector, the share of the nondurable goods industries in the area's total nonagricultural employment has been declining steadily. This trend is consistent with national trends. The long-term growth sectors are services and government which have shifted their combined share from 24.7 percent of the labor force in 1960 to 31.3 percent in 1973.

TABLE 9

TRENDS IN PERCENT DISTRIBUTION OF NONAGRICULTURAL EMPLOYMENT BY MAJOR INDUSTRIAL CLASSIFICATION FOR SELECTED YEARS IN THE KANSAS CITY SMSA

Major Industrial Classification	1960	1965	1967	1969	1970	1972[1]	1973[2]	1975[3]
Mining	.2	.1	.1	.1	.1	.1	.1	.1
Contract construction	5.3	5.8	5.1	4.6	4.1	4.7	4.8	5.8
Manufacturing	26.6	25.9	27.2	25.7	24.8	23.0	22.9	26.4
Durable goods	14.2	14.8	16.1	15.2	14.4	NA	NA	15.8
Nondurable goods	12.4	11.1	11.1	10.5	10.4	NA	NA	10.6
Transportation, communication, electric, gas, and sanitary services	10.9	10.2	10.1	9.9	10.1	9.4	9.2	9.0
Wholesale & retail trade	25.3	24.5	23.8	24.4	24.6	24.8	25.2	22.8
Finance, insurance, & real estate	6.8	6.5	6.3	6.2	6.4	6.5	6.5	6.2
Services	12.8	14.2	14.3	15.4	15.9	16.1	16.0	15.2
Government	11.9	12.8	12.9	13.5	13.9	15.4	15.3	14.5

[1] U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, XVII (May, 1972), pp. 74-5. (Data for March, 1972.)

[2] U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, XIX (March, 1973), pp. 72-3. (Data for January, 1973.)

[3] Projected by Arthur D. Little, Inc., 1968.

Projections of Employment in Nonagricultural Industries

Shown in Table 10 are the actual percentage distributions of employment among the major nonagricultural industry sectors of the economy together with projections made at different times up to and including 1975.

When the actual 1973 distribution of employees by industrial classification is compared with National Planning Association (NPA) 1967 projections and Arthur D. Little, Inc. (ADL) 1968 projections of the 1975 projected industry classification structure, it is found that the 1973 actual structure (January, 1973) is closer to the ADL than the NPA projections. ADL projections for 1975 deviate most noticeably from the 1973 percent distribution in the areas of manufacturing, wholesale and retail trade, and contract construction classifications. NPA projections deviate most noticeably in the government, contract construction, and wholesale retail trade classifications. Both ADL and NPA projections were higher for percentage of nonagricultural employment in contract construction and both were considerably below the trend in wholesale and retail trade. ADL projections were considerably higher for manufacturing employment and NPA projections were considerably lower for employment in government.

TABLE 10

PROJECTIONS AND ACTUAL PERCENT OF NONAGRICULTURAL EMPLOYMENT AMONG INDUSTRIAL CLASSIFICATIONS IN THE KANSAS CITY SMSA

Major Industrial Classification	Actual Percent Distribution			Projections for 1975			Projections for 1980
	1970[1]	1972[2]	1973[3]	ADL[4]	NPA[5]	NPA[6]	NPA[6]
Mining	.1	.1	.1	.1	.1	.1	.1
Contract construction	4.1	4.7	4.8	5.8	7.3	6.1	5.8
Manufacturing	24.8	23.0	22.9	26.4	23.7	22.7	21.8
Transportation, communication, electric, gas, and sanitary services	10.1	9.4	9.2	9.0	8.1	8.2	7.7
Wholesale & retail trade	24.6	24.8	25.2	22.8	23.1	25.4	24.4
Finance, insurance, & real estate	6.4	6.5	6.5	6.2	8.1	6.0	5.9
Services	15.9	16.1	16.0	15.2	16.6	16.7	17.9
Government	13.9	15.4	15.3	14.5	13.0	14.7	16.3
Total Nonagriculture employment	508.4	516.7	532.2	550.5	528.0	616.0	693.3

---

[1] U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings: States and Areas, 1939-70*, Bulletin No. 1370-8, pp. 321-323.

[2] U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, XVII (May, 1972), pp. 74-5. (Data for March, 1972.)

[3] U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, XIX (March, 1973), pp. 72-3. (Data for January, 1973.)

[4] Projections by Arthur D. Little, Inc., 1968.

[5] National Planning Association, Center for Economic Projections, *Economic and Demographic Projections for Two Hundred and Twenty-Four Metropolitan Areas*, Regional Economic Projections Series Report No. 67-R-1 (Washington, D.C.: The Association, May, 1967), p. S-765.

[6] National Planning Association, Center for Economic Projections, *Metropolitan Area Growth Patterns for the Coming Decade*, Regional Economic Projections Series Report No. 70-R-2 (Washington, D.C.: The Association, December, 1970), p. S-112.

considerably above for manufacturing employment and NPA projections were considerably below for employment in government.

In December, 1970, the National Planning Association made revised projections for 1975 for the Kansas City SMSA which are closer to the January, 1973, actual employment figures than either of the earlier projections. Greatest differences were observed in terms of higher projections for employment in contract construction and lower projections for employment in wholesale and retail trade and for transportation, communications, gas, electric and sanitary services.

Shown in Table 10 are also projections for 1980. It is significant to note that a continued slow decline in manufacturing industry is anticipated. The service and government sectors are expected to continue increasing. A proportional decline is expected in the transportation, communications and utilities sector. An upswing is expected in contract construction and a slight proportional decline is anticipated in the finance, insurance and real estate sectors of the area's economy.

Data are presented in Table 11 on projections of industrial structure in the Kansas City SMSA, for Missouri, and for the nation. It is possible to compare expected developments in the economy of the local area against projections based on long-term trends in the larger area of which the Kansas City SMSA is a part. As can be seen, employment in the contract construction industry in the Kansas City SMSA is expected to constitute a larger percentage of the local economy than in the State of Missouri or in the nation. Manufacturing is expected to decline both in Missouri and in the nation as a proportion of total nonagricultural employment. Employment in transportation, communications, and utilities industries is higher in the Kansas City SMSA than in Missouri and the nation as is the case with wholesale and retail trade and finance, insurance, and real estate. Although employment in the service and government sectors is expected to increase in the KCSMSA, the share of total employment in the area is expected to remain considerably below that for Missouri and the nation.

Unemployment

Average annual unemployment in the Kansas City SMSA for 1970, 1971 and 1972 was 5.1, 6.1, and 5.7 percent, respectively.[1] Unemployment began to increase in April, 1970 and peaked during the summer 1971. During 1972 there was a decline. This relatively high rate of unemployment in the area reflected labor disputes, decline of employment in industries producing war related materials and the general economic slowdown associated with cessation of the Viet Nam war.

---

[1] Division of Employment Security, Kansas City, Missouri.

TABLE 11

PROJECTIONS FOR NONAGRICULTURAL INDUSTRIAL SECTOR EMPLOYMENT FOR KANSAS CITY SMSA, MISSOURI, AND THE USA

(In Thousands)

Major Industrial Classification	1975				1980		
	KCSMSA		Missouri[2]	USA[2]	KCSMSA[1]	Missouri[2]	USA[2]
	ADL	NPA[1]	NPA	NPA	NPA	NPA	NPA
Mining	.1	.1	.4	.6	.1	.3	.6
Contract construction	5.8	6.1	5.2	5.3	5.8	5.2	5.2
Manufacturing	26.4	22.7	24.5	24.8	21.8	23.1	23.6
Transportation, communication, electric, gas, and sanitary services	9.0	8.2	6.3	5.5	7.7	5.8	5.3
Wholesale & retail trade	22.8	25.4	21.2	19.9	24.4	19.8	18.6
Finance, insurance, & real estate	6.2	6.0	4.8	4.9	5.9	4.6	4.8
Services	15.2	16.7	19.7	20.5	17.9	20.0	21.3
Government	14.5	14.7	17.9	18.5	16.3	21.0	20.5
Total Nonagriculture employment	550.5	616.0	2010.3	86359.8	693.3	2215.1	94850.6

[1] National Planning Association, Center for Economic Projections, Metropolitan Area Growth Patterns for the Coming Decade, Regional Economic Projections Series Report No. 70-R-2 (Washington, D.C.: The Association, December, 1970), p. S-112.

[2] National Planning Association, Center for Economic Projections, State and Demographic Projections to 1975 and 1980, Regional Economic Projection Series Report No. 70-R-1 (Washington, D.C.: The Association, April, 1970), pp. S-12 and S-30.

Other Economic Indicators

A detailed study of economic conditions in the Kansas City area revealed that compared to 44 of the largest regions in the United States, the average growth rate in per capita income between 1940 to 1968 was well above the median and in third rank.[1] Compared to 39 other metropolitan regions, the 1969 cost of living in the Kansas City Metropolitan Region ranked slightly below the median. Compared to 17 other Standard Metropolitan Statistical areas, the average annual growth rate in family living costs for the decade ending in 1969 was slightly below the median.

---

[1] Metropolitan Planning Commission -- Kansas City Region, Income Cost of Living Expenditures, pp. 42; 47; 51.

Part III - Manpower Requirements

Introduction

An analysis of manpower needs as a basis for area-wide educational planning is essential in fostering the economic well-being of any metropolitan area. An adequate supply of qualified manpower is necessary for the economic growth of an area. The manpower requirements of an economy represent the demand side of the picture of need for educational programs.

In the proceeding portion of this chapter, the data used for detecting changes in industrial structure of the economy were based upon U.S. Bureau of Labor Statistics (BLS) wages and salary employment definitions. In this section, the study of manpower occupational structure trends in the labor force is based upon employment information of the U.S. Bureau of the Census as well as an entirely different set of definitions. There are two major differences between the two types of data. The BLS employment statistics are collected on an establishment or place of work basis. They exclude self-employed and unpaid family workers. These persons, however, are counted in the Bureau of Census system of enumeration. The differences in coverage of occupations are not significant at the level of total metropolitan area employment in all industries, but in some cases they become important at the level of some individual industry sectors, such as the services sector. Furthermore data differ in the treatment of business units considered as parts of an establishment (such as, central administrative offices and auxiliary units in a large organization) in the classification of establishments; and, in their use of different reporting patterns by multi-unit companies. For example, the Bureau of the Census "government" sector includes employment only in "public administration." Persons counted in this sector are involved in uniquely governmental functions such as legislative and judicial activities as well as most other activities in the executive agencies. Government agencies engaged in educational or medical services and in activities commonly carried on also by private establishments are classified in the appropriate occupational category. In contrast, the BLS system classifies employment in all government agencies in a single major group. Therefore, these differences in total employment figures between sets of data from two different sources as well as apparent numerical inconsistencies in data tend to blur distinctions between manpower data bases. For example, the total number of employed persons for the Kansas City SMSA in 1970 was recorded by BLS as 508,400 and by the Bureau of Census as 520,945.

The purpose of this section is to highlight trends in occupational structure of the labor force and deviations from earlier projections which have important implications for educational planning. Extrapolations are made to 1980.

Occupational Structure of the Employed Population

Shown in Table 12 are the numbers of persons over age 16 employed by major occupational classifications at the time of the 1970 Census enumeration in the Kansas and Missouri portions of Kansas City SMSA. For occupational classifications which were common to both the 1960 and 1970 Census enumerations, percentage changes are shown. Whereas, the 1960 Census data were classified in broad categories, the 1970 classifications were much more detailed and for the first time reported various types of technicians separately. Of the total number of persons employed, over two-thirds (68.5 percent) were in the Missouri portion of the SMSA. It can be seen that the largest numbers of persons are employed in the occupational classifications of clerical and kindred; professional, technical and kindred; craftsmen; foremen and kindred; and, as operatives in fields other than transportation. Between 1960 and 1970 there was a net increase of 30.2 percent in total number employed. The largest percentage increase was in the professional, technical and kindred occupations. There were percentage decreases of persons employed as private household workers, farmers and farm managers, and farm laborers and foremen.

Presented in Table 13 are numbers of persons employed in 1960 and 1970 by major occupational categories. Presented also are projections of demand and percentage distributions of the labor force by major occupational classification to demonstrate the change in actual and expected occupational structure. Included are projections for the SMSA plus Leavenworth County in Kansas prepared in 1972.[1] Although the projections are for a slightly larger area than the SMSA, the occupational structure envisioned by 1975 is of major interest.

In 1970, the existing occupational distribution was close to the one projected for 1975 by ADL in 1967-1968. The largest deviation was in the classification of laborers where the actual proportion exceeded the proportion of forecast. The other projection by MARC for the SMSA and Leavenworth County differed most in the proportion of professional, technical, and kindred workers and for operatives. It is expected that above average growth will occur in the professional/technical and service classifications. Craftsmen, foremen and kindred workers are expected to show below average growth. About average growth rates are expected to exist for nonfarm managers, officials and proprietors, and for clerical and kindred workers.

Shown in Table 14 are occupational classification structures of the United States with projected 1980 requirements and actual and projected structures for the Kansas City SMSA. In view of evolving patterns of employment, we have extrapolated to 1980 by modifying our anticipated occupational classification structure for 1975 as shown in Table 14. Major modifications are in the proportion of professional, technical and kindred workers and the proportion of service workers with a decline in expected proportion of operatives and kindred workers. These modifications are in harmony with trends expected in the industrial sector, moreover, changes indicated above are consistent with national trends in an economy where noncommodity occupations are on the increase.

---

[1] Mid-America Regional Council, Manpower Planning Department, Metropolitan Kansas City Comprehensive Manpower Plan. P. 28.

TABLE 12

OCCUPATIONAL CATEGORY OF EMPLOYED PERSONS[1] IN THE KANSAS CITY SMSA, 1970

Major Occupational Category	Number Employed			Percent Change From 1960
	Kansas Portion	Missouri Portion	SMSA Total	
Total employed persons 16 & over	164,015	356,930	520,945	30.2
Professional, technical & kindred	27,980	48,851	76,831	61.0
Engineers	3,160	4,603	7,763	
Physicians, dentists, practioners	1,806	1,964	3,770	17.0[2]
Health workers, except practioners	2,810	5,475	8,285	
Teachers, elementary & secondary	5,485	9,698	15,183	70.9
Technicians, except health	2,392	4,407	6,799	
Other professional workers	12,327	22,704	35,031	
Managers & Administrators, except farm	17,663	27,832	45,495	7.8
Manufacturers	3,080	3,816	6,896	
Retail trade	3,108	5,726	8,834	
Other industries	9,690	14,076	23,766	
Self employed retail	805	2,107	2,912	
Self employed other	980	2,107	3,087	
Sales workers	16,348	25,382	41,730	16.2
Clerical and kindred	34,288	81,165	115,453	38.5
Craftsmen, foremen, kindred	21,161	49,879	71,040	27.1
Operatives, except transportation	15,280	43,872	59,152	13.9[3]
Transportation equipment operator	6,118	15,136	21,254	
Laborers, except farm	7,495	17,520	25,015	18.7
Farmers and farm managers	698	2,325	3,023	-27.3
Farm laborers & farm foremen	385	1,281	1,666	-11.4
Service workers, except private household	15,528	39,515	55,043	49.1
Private household workers	1,071	4,172	5,243	-34.2

---

[1] U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, 1970 Census of Population: General Social and Economic Characteristics, p. 302.

[2] Includes all medical and other health workers as classified by the U.S. Bureau of Census for the 1960 Census.

[3] Includes all operatives in transportation and others as classified by the U.S. Bureau of the Census for the 1960 Census.

TABLE 13

ACTUAL AND PREDICTED CHANGES IN THE GENERAL OCCUPATIONAL COMPOSITION OF EMPLOYEMENT IN THE KANSAS CITY SMSA

Occupational Classification	Number Employed		Projected Number		Percent Distribution			
					Actual		Projected	
	1960	1970	1975*	1975#	1960	1970	1975*	1975#
Professional, Technical and Kindred Workers	47,714	76,831	85,426	79,070	11.9	14.7	15.5	11.5
Clerical and Kindred Workers	83,380	115,453	122,005	135,024	20.8	22.2	22.1	19.7
Craftsmen, Foremen and Kindred Workers	55,903	71,040	76,123	91,305	14.0	13.6	13.8	13.3
Managers, Officials and Proprietors, except Farm	42,209	45,495	51,664	75,706	10.5	8.7	9.4	11.0
Sales workers	35,920	41,730	43,616	49,206	9.0	8.0	7.9	7.2
Operatives and Kindred Workers	70,617	80,406	90,653	146,181	17.6	15.4	16.5	21.3
Service Workers	43,402	60,286	61,533	76,303	10.9	11.6	11.2	11.1
Laborers	21,078	25,015	20,019	27,607	5.3	4.8	3.6	4.0
TOTAL	400,223	520,945	551,039	685,894				

---

* Arthur D. Little, Inc. A Development Program for Metropolitan Junior College Kansas City, Volume 3, May, 1968, pp. 38-41 (Kansas City SMSA).

Manpower Planning Department, Mid-America Regional Council, Metropolitan Kansas City Comprehensive Manpower Plan, Fiscal Year 1973, p. 28 (Kansas City SMSA plus Leavenworth. County Kansas)

TABLE 14

PROJECTIONS OF LABOR FORCE BY PERCENT OF OCCUPATIONAL CLASSIFICATION
(In Thousands)

Major Occupational Classification	United States Actual 1970[1]	United States Projected 1980[2]	KCSMSA Actual 1970[3]	KCSMSA Projected 1975[4]	KCSMSA Projected 1980[5]
Professional, technical and kindred workers	15.3	16.8	14.7	15.5	16.3
Clerical & kindred workers	18.5	18.7	22.2	22.1	22.1
Craftsmen, foremen & kindred workers	14.3	13.2	13.6	13.8	13.4
Nonfarm managers, officials & proprietors	8.6	10.3	8.7	9.4	9.0
Sales workers	7.3	6.5	8.0	7.9	7.4
Operatives & kindred workers	18.1	16.6	15.4	16.5	14.3
Service workers	13.2	14.2	11.6	11.2	13.8
Laborers	4.6	3.8	4.8	3.6	3.7

---

[1] U.S. Department of Commerce, Bureau of the Census, General Social and Economic Characteristics: United States Summary (Washington, D.C.: Government Printing Office, June, 1972), p. 91.

[2] U.S. Department of Labor, Bureau of Labor Statistics, Occupational Manpower and Training Needs (Washington, D.C.: Government Printing Office, 1971), p. 11.

[3] U.S. Department of Commerce, Bureau of the Census, General Social and Economic characteristics: Missouri (Washington, D.C.: Government Printing Office, 1972), p. 266.

[4] Arthur D. Little, Inc., A Development Program for Metropolitan Junior College -- Kansas City, Volume III, 1968, pp. 38-41.

[5] Arthur D. Little, Inc., 1973.

Approximately 114,600 additional persons will be required in the Missouri portion of the SMSA labor force between 1970 and 1980 if (1) the total population approximates 1,445,800, (2) the percent of persons of working age engaged in gainful employment is 47.6 and (3) the ratio of nonagricultural labor force in Missouri to the SMSA remains relatively the same. These are requirements that are directly attributed to the growth or decline of the local economy and do not include replacement requirements due to death, retirement, transfers, and other types of manpower loss. This calculation does not reflect the change in occupational structure referred to and accommodated in the projections which appear below.

Labor Force Projections by Occupational Classification

Since employment figures gathered by the Bureau of Labor Statistics tend to be lower than U.S. Census counts due to reasons explained above, Census data will be used for the Kansas City SMSA extrapolations of manpower need. Employment participation rates in the Kansas City SMSA based upon the total population were 41.2 and 43.5 percent, respectively, for 1960 and 1968. They are estimated to be on the order of 45.9 and 47.6 for the years 1975 and 1980, respectively.[1] Shown in Table 15 are the numbers of persons expected to be employed by occupational classification in nonagricultural industries based upon our judgment of realistic future population estimates. Shown also are gross estimates of additional numbers of jobs that will become available by occupational classification in the Missouri portion of the SMSA provided the same proportion of employed persons in the SMSA exists as was true in 1970. Data indicate that this relationship is subject to slow change; thus, the estimates are approximate.

Observing Table 15, it can be seen that if the population increases as expected and the occupational structure of the labor force develops in accordance with expected trends, there will be 117,800 job increases in the Missouri portion of the Kansas City SMSA between 1970 and 1980. The largest numerical increase is expected in the clerical and kindred worker classification with the next largest increase among service workers. The third largest increase is expected in the professional, technical and kindred worker classification. The increase in operatives and kindred workers will be due in large part to expected increases in the manufacture of fabricated metal products, machinery (except electrical), ordnance, scientific, and miscellaneous products, and rubber, plastic, and leather products.[2]

---

[1] National Planning Association, Center for Economic Projections, Metropolitan Area Growth Patterns for the Coming Decade, Regional Economic Projections Series, Report No. 70-R-2 (Washington, D.C.: The Association, December, 1970), p. S-34.

[2] Metropolitan Planning Commission - Kansas City Region, Demand for Industrial Land, 1968-1990, pp. 194-197.

TABLE 15

PROJECTIONS OF NUMBERS OF PERSONS BY OCCUPATIONAL CLASSIFICATION FOR 1980 IN THE KANSAS CITY SMSA AND MISSOURI PORTION

Major Occupational Classification	KCSMSA Numbers in Thousands		Number of Job Increases (000)	
	1980	1970	SMSA	Missouri Portion
Total	688.2	516.3*	171.9	117.8
Professional, technical and kindred workers	112.2	76.8	35.4	22.6
Clerical & kindred workers	152.1	115.4	36.7	25.8
Craftsmen, foremen & kindred workers	92.2	71.0	21.2	15.0
Nonfarm managers, officials & proprietors	61.9	45.5	16.4	10.0
Sales workers	50.9	41.7	9.2	5.6
Operatives & kindred workers	98.4	80.4	18.0	13.2
Service workers	95.0	60.3	34.7	25.2
Laborers	25.5	25.0	.5	.4

*Farm laborers, foremen, managers and proprietors not included.

As a basis for establishment of a relationship between occupational needs and educational program planning, greater detail relative to specific occupational categories or families (clusters) of occupations is needed as contrasted to detail in terms of industrial sectors. Greater detail can be achieved through carefully designed and exhaustive labor skill surveys or through the implementation of ad hoc advisory committees of employers. We recommend efforts of the Metropolitan Junior College District in its use of the latter approach to program need identification and in the determination of program components. In this study we have extended our manpower requirements analysis through meetings with two groups of executives representing a cross section of industrial business, governmental, and service establishments in the Kansas City, Missouri Metropolitan area. The purpose was to achieve the added dimension of detail and concreteness required in educational planning. These data appear in Chapter VI.

CHAPTER III

PAST AND PROJECTED ENROLLMENTS

Introduction

In this chapter are presented historical data on enrollments in the Metropolitan Junior College District. Information is presented on the total head count and full-time equivalent (FTE) enrollments for each College according to whether students were enrolled part-time or full-time or whether they were enrolled during the day or evening. Enrollments which have materialized in recent years are compared to earlier projections made in 1967-1968 by Arthur D. Little, Inc. Projections of future enrollments are presented which reflect trends and conditions during recent years.

Comparison of Actual and Projected Enrollments

In November 1962 projections were made of enrollment potential by the writer for a metropolitan Kansas City Junior College District which had not been created. The 1962 forecast for the fall semester 1970 was for between 6,600 and 11,000 head count students and between 5,400 and 8,900 full-time equivalent students.[1] One can see from data in Table 16 that the actual head count enrollment was 7,778 and the actual FTE was 6,233. While the actual head count and FTE enrollments eight years after the projection approximated the middle of the range forecast they did not materialize in accordance with the judgment made then that, "It is reasonable to assume that enrollments may be expected to approximate if not exceed the upper limits of the ranges."[2] These early projections

TABLE 16

COMPARISON OF ACTUAL AND PREDICTED ENROLLMENTS FOR MJCD

Year	Predicted*		Actual	
Year	Head Count	FTE	Head Count	FTE
1968-69	8,270	5,260	5,887	4,258
1969-70	9,210	5,810	6,768	5,099
1970-71	10,420	6,530	7,778	6,233
1971-72	12,040	7,490	9,094	7,307
1972-73	13,130	8,120	9,592	7,530
1979-80	26,860	16,090	--	--

*Arthur D. Little, Inc., A Development Program for Metropolitan Junior College - Kansas City, Volume II, Guidelines for Development, p. 31.

---

[1] "Citizens Survey of Kansas City Metropolitan Area Junior College District Possibilities," November, 1962, pp. 23-25.

[2] Ibid., p. 23.

were based on the assumptions that programs would be offered in two or three locations, that programs and services would be comprehensive, and that there would be a close relationship between the programs and services offered and the needs and life of the community.

Shown in Table 16 are enrollment projections made in 1967-1968 compared to actual enrollments which developed. Observation reveals that, while the projected FTE enrollments have corresponded reasonably well with the actual FTE, actual head count enrollments have been considerably under those forecast. Several major assumptions undergirded these projections. One was that increasing numbers of part-time day enrollments of adults would be generated in the community so that the percent of part-time enrollment expected in the daytime would increase from 16 to about 33 percent. The ratio of part-time students to full-time students was projected to increase from 1.3408 to 2.5000. It was assumed also that through increasingly effective guidance and counseling an increasingly greater portion of full-time freshmen would return the following year so the ratio between freshmen and sophomores would increase from 0.42 to about 0.66. The ratio of full-time unclassified enrollments to total full-time freshmen and sophomore enrollment was expected to increase from 5 percent to 12 percent. It was also assumed the full-time equivalent enrollment would change from 65 percent of head count to 60 percent of head count. Comprehensiveness of programs and services in the MJCD, an open door admissions policy, and a well conceived guidance and counseling system efficiently operated and effectively articulated with counseling programs in the high schools were assumed as conditions basic to the enrollment projections.

Recent Enrollments in MJCD Colleges

Data are presented in Table 17 on enrollments in each of the colleges in the Metropolitan Junior College District. Head count enrollments increased 41.7 percent in the District from the year 1969-70 to 1972-73. Full-time equivalent enrollments in the District increased during the same period by 47.7 percent. During the last four years the ratios of full-time equivalent enrollments to head count enrollments have varied slightly at each college without showing a trend. The consistently lower percentage at Penn Valley Community College reflects the presence of a larger percentage of part-time students than were enrolled in the other colleges. Over the last few years, the full time equivalent enrollment was 78.7 percent of the head count enrollment in the district. Full-time equivalent enrollments at Longview, Maple Woods, and Penn Valley Community Colleges during the four-year period were 84, 81 and 75 percent, respectively.

Observing the data one can see that the head count enrollment at Longview has gradually increased as a proportion of the total head count enrollment in the District. The head count enrollment at Penn Valley, while increasing each year, has decreased gradually as a proportion of the District head count enrollment. The head count enrollment at Maple Woods has remained at a fairly constant level as a proportion of total District head count enrollment. The relative proportions of full-time equivalent students among the colleges has approximated the proportions of head count enrollments.

TABLE 17

ENROLLMENTS IN THE MJCD COLLEGES

	Year			
Enrollment By College	1969-70	1970-71	1971-72	1972-73
Head Count Enrollment				
Longview	1504	2107	2689	2949
Maple Woods	985	1409	1731	1784
Penn Valley	4279	4262	4674	4859
Total	6768	7778	9094	9592
Full-Time Equivalent Enrollment				
Longview	1197	1802	2356	2436
Maple Woods	797	1171	1418	1406
Penn Valley	3105	3260	3533	3688
Total	5099	6233	7307	7530
FTE as Percent of Head Count				
Longview	79.58	85.52	87.61	82.60
Maple Woods	80.91	83.10	81.91	78.81
Penn Valley	72.56	76.48	75.58	75.90
Total	75.34	80.14	80.35	78.50
Percent of District Head Count Enrollment				
Longview	22.2	27.1	29.6	30.7
Maple Woods	14.6	18.1	19.0	18.6
Penn Valley	63.2	54.8	51.4	50.7
Percent of District FTE Enrollment				
Longview	23.5	28.9	32.2	32.3
Maple Woods	15.6	18.8	19.4	18.7
Penn Valley	60.8	52.3	48.4	49.0
Percent Annual Head Count Change				
Longview		40.1	27.6	9.7
Maple Woods		43.0	22.8	3.1
Penn Valley		- .4	9.7	4.0
Total		14.9	16.9	5.5
Percent Annual FTE Change				
Longview		50.5	30.7	3.4
Maple Woods		46.9	21.1	- .8
Penn Valley		5.0	8.4	4.4
Total		22.2	17.2	3.1

While the percentage changes in both head count and FTE enrollments over the last four years have been decreasing, the decrease has been most pronounced at Longview and Maple Woods Community Colleges. The numbers of students enrolled have increased each year except between the 1971-1972 and 1972-1973 school years at Maple Woods where the number declined slightly. It is typical for community college enrollments to evidence larger percentage increases during the early years of existence than at any other time.

Presented in Table 18 are data on recent head count and FTE enrollments for daytime and evening periods. The part-time daytime enrollments increased in all colleges during 1972 compared to enrollments in 1971. Full-time evening enrollments increased in all colleges in 1972 compared with 1971. Part-time evening enrollments in 1972 decreased over 1971 except at Maple Woods where there was a slight increase in both head count and FTE.

TABLE 18

ENROLLMENT BY STATUS AND TIME OF DAY

Enrollment By College and Time of Day	Head Count				Full Time Equivalent			
	Full Time		Part Time		Full Time		Part Time	
	1971	1972	1971	1972	1971	1972	1971	1972
Day Enrollments								
Longview	1436	1345	373	832	1752	1631	214	410
Maple Woods	820	741	275	400	977	875	155	232
Penn Valley	1702	1752	1015	1199	2013	2050	578	648
Total	3958	3838	1663	2431	4742	4556	947	1290
Evening Enrollments								
Longview	58	85	822	687	64	99	326	296
Maple Woods	46	50	590	593	51	56	235	242
Penn Valley	136	192	1821	1716	152	219	790	772
Total	240	327	3233	2996	267	374	1351	1310

Shown in Table 19 are the head count and FTE enrollments by percent for each college during 1971 and 1972. These percentages show more vividly than numbers of students enrolled the change in enrollment mix between part-time and full-time day and evening enrollments. Percentages are shown for each college and for the MJCD according to whether the enrollment during the day and evening was full time or part time.

In 1971, there was a 70-30 percentage division in the MJCD of total full-time and part-time head count day enrollments, whereas in 1972 the division was about 61-39 percent. The evening full-time and part-time head count enrollment was divided 7-93 percent in 1971, and in 1972 the division was 10-90 percent. The ratio of part-time to full-time head count day and evening students was 1.234 in the MJCD for the two year period.

FTE day enrollments for the MJCD in 1971 were divided between part-time and full-time by a 17-83 percent split, and in 1972 the division was 22-78 percent. Evening FTE enrollments were divided on an 83-17 basis between part-time and full-time students in 1971, but in 1972 the division was 78-22 percent. The ratio of part-time to full-time FTE day and evening students was .493 in the MJCD for the two year period.

TABLE 19

HEAD COUNT AND FTE ENROLLMENT BY PERCENT FOR DAY AND EVENING

Enrollment By By College and Time of day	Head Count				Full-Time Equivalent			
	1971		1972		1971		1972	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
Day Enrollments								
Longview	79.4	20.6	61.8	38.2	89.1	10.9	79.9	20.1
Maple Woods	74.9	25.1	64.9	35.1	86.3	13.7	79.0	21.0
Penn Valley	62.6	37.4	59.4	40.6	77.7	22.3	76.0	24.0
Total	70.4	29.6	61.2	38.8	83.4	16.6	77.9	22.1
Evening Enrollments								
Longview	6.6	93.4	11.0	89.0	16.4	83.6	25.1	74.9
Maple Woods	7.2	92.8	7.8	92.2	17.8	82.2	18.8	81.2
Penn Valley	6.9	93.1	10.1	89.9	16.1	83.9	22.1	77.9
Total	6.9	93.1	9.8	90.2	16.5	83.5	22.2	77.8

An analysis of the residential distribution of full-time head count students revealed that over the past four years, 1.5 percent of the students were from out of state. Most of the students, 88.8 percent, were from the MJCD, but 9.6 percent were from Missouri outside the MJCD. Over a fifth of the students at Maple Woods Community College (23.4 percent) were from Missouri outside the MJCD. Percentages of students from Missouri outside the MJCD were 7.6 percent at Longview and 5.4 percent at Penn Valley. A similar analysis revealed that of all part-time enrollments in the MJCD during the past four years, 90.2 percent were residents of the District, 7.9 percent were from Missouri outside the District and 1.9 percent were from out of state. Over a fifth of the part-time head-count students at Maple Woods Community College (21.9 percent) during the past four years were from Missouri outside of the MJCD. Percentages of head count part-time students from Missouri outside the MJCD at Longview and Penn Valley Colleges were 6.8 and 4.5, respectively.

An analysis of enrollments at each college in terms of high school attended within the MJCD revealed the extent to which each college attracts students from the primary service area of another college. Across the district, in the spring 1973, approximately a fifth of all students enrolled had graduated from a high school in the primary service area of another MJCD college. This was the case for approximately 14 percent at Maple Woods, and 22 percent at each Penn Valley and Longview colleges.

Shown in Table 20 are the percentages of total head count enrollments for students classified as freshmen and sophomores in each classification. The percentage of sophomores has been consistently higher at Penn Valley Community College than at the other two colleges. For the three-year period, the fall head count enrollment percentage of sophomores and freshmen was 28 and 72 percent, respectively in the MJCD. Due to the in and out nature of enrollments of persons who leave and return periodically in a public community college, it is extremely difficult without longitudinal studies over a considerable period of time to determine accurately what proportion of all entering freshmen complete the sophomore year. In addition, some students transfer before completing the full two years at a community college, others complete one year certificate programs and leave, while still others, particularly in the occupational programs, leave when they have developed enough specialized skill to be employable before completing a full two year program.

TABLE 20

PERCENT OF ENROLLMENTS BY SOPHOMORE AND FRESHMEN CLASSIFICATIONS

Student Classification By College	Fall 1970	Fall 1971	Fall 1972	3 Year Period
Freshmen				
Longview	85	68	76	76
Maple Woods	84	70	75	76
Penn Valley	80	61	65	69
District	82	65	70	72
Sophomores				
Longview	15	32	24	24
Maple Woods	16	30	25	24
Penn Valley	20	39	35	31
District	18	35	30	28

A useful index of institutional holding power is the percentage of entering freshmen who become sophomores the following year. These indices are important, because they reflect the atmosphere, or climate, which is likely to exist on a campus. They are also often indicative of policies and practices in operation on the college campuses. A study of extent to which freshmen entering during the fall 1970 and 1971 commenced the sophomore year the next fall revealed the following retention ratios:[1]

College	1971	1972
Longview	47.0	39.3
Maple Woods	44.0	37.4
Penn Valley	53.8	56.8
District	50.1	47.6

The typical retention rate among midwestern comprehensive community colleges is around 60 percent. The retention rates for the Kansas City Metropolitan Junior College District are considerably below the typical rate.

---

[1] MJCD Office of Education Development and Research, "Enrollment Projection Study: 1973-1974," November, 1972, p. 21.

Methodology for Projecting Enrollments

Several methods are available for forecasting community college enrollments. One method is to forecast on the basis of a ratio between each thousand of total population in the area served predominately by a community college district assuming a certain proportion would enroll in community college programs. Another method assumes that full-time equated enrollment potential of a public community college would be equivalent to a proportion of all youth age 17-18 or 18-24 in the District. Yet, another method is to forecast the size of the freshman class each year based on proportions of projected 12th grade students who might be expected to enroll, assumptions about the retention ratio of freshmen who enter the sophomore year, and the addition of an assumed percent increase for older age, out of district, and out of state persons who would enroll part or full-time. Another method is to project the total numbers of persons likely to enroll in any form of post-secondary education then make assumptions about the proportion that would attend a community college.

Research and experience have demonstrated that the method which most closely approximates enrollments as they actually develop is based upon a ratio of potential community college enrollments to the size of enrollments in grades 9-12 of high schools in the service area. This method does not assume that a certain proportion of students in grades 9-12 will enroll. Rather the assumption is that there is a relationship between full-time equated community college enrollment potential for students of all ages, young or old and regardless of residence, to the size of grades 9-12. This is the method used in this study.

High School Enrollment Forecasts

Basic to a determination of potential public community college enrollment forecasts is the projection of students in grades 9-12 of all the high schools in the Metropolitan Junior College District. To do this, actual enrollments were obtained for each grade 1-12 inclusive for all elementary and secondary schools in the MJCD for the years 1962-63 - 1972-73 inclusive. Ratios of change were computed between the number of pupils in each grade one year to the number in the next highest grade the next year. Indices of change from one grade to the next were averaged for the entire ten year period and for the last five year period. Observation of these indices of change revealed that there was a difference between the average rates of change during the most recent five year period compared with the average rates of change for the entire ten year period. In general, the latter showed a decreasing rate of change in some areas and a marked increase in others.

On the assumption that the average index of change during the last five years would most nearly reflect the trend for the future, it was applied individually to the last known actual enrollments in each grade in each public school district and private school in the MJCD to project from one year to the next the numbers of students in grades 9-12 expected to the year 1980-81.

This method of projecting public school enrollments reflects differences in residential saturation, economic character, and birth rate trends throughout the MJCD. Methods used also assume that the proportion of seriously handicapped children, school dropouts, death rates, and migration rates would remain fairly constant. This method takes into account the combined effect of these several variables. Projections are also based on the additional assumption that economic and social conditions will not change radically from what they are presently and from what they have been during the previous decade. The method does not account for the unknown happenstance of a windfall or catasthrophe, such as one or more large industrial enterprises moving into or out of the area, a major economic depression, or an unforeseen military conflict. Such unforeseen events will invalidate any enrollment projection, regardless of method used.

Based upon the methods and assumptions discussed above, total numbers of students in grades 9-12 were projected as shown in Table 21. On observing the projections, one can immediately notice the decline in total numbers of youth in the high schools. After peaking in 1974-75 total enrollments are expected to decline by about 19 percent by the school year 1980-81. One factor which might cause deviations from the projected pattern of enrollments would be a redistribution precipitated by the development of high intensity residential dwellings in the suburban areas, particularly in the North Kansas City area. The nature and rapidity of that change cannot be ascertained at this time. Whatever the causes, the fact is, that unless there are unforeseen counteracting forces to alter the trend, there will be a declining high school enrollment over the next eight years throughout the MJCD.

TABLE 21

PROJECTED ENROLLMENTS IN GRADES 9-12

Year	Kansas City	Diocease	North K. City	Raytown	Center	Belton-Grandview H. Mills-L. Summit	Total 9-12
1973-74	18397	4641	6716	4993	1871	9530	46148
1974-75	18090	4554	6916	4955	1876	9842	46233
1975-76	17536	4404	7021	4890	1840	10225	45916
1976-77	16980	4156	7131	4742	1829	10493	45331
1977-78	16190	3765	7164	4606	1772	10503	44000
1978-79	15261	3363	7038	4389	1673	10388	42112
1979-80	14334	3050	6841	4074	1574	10047	39920
1980-81	13598	2658	6673	3754	1460	9464	37607

Shown in Table 22 are the projected numbers of high school seniors for the years ahead. The total number of seniors is expected to peak in the year 1977-78 then decline about 22 percent by the year 1982-83.

TABLE 22

PROJECTED NUMBERS OF HIGH SCHOOL SENIORS

Year	Kansas City	Diocese	North K. City	Raytown	Center	Belton-Grandview H. Mills-L. Summit	Total 9-12
1973-74	4053	1067	1527	1180	447	2041	10315
1974-75	3925	988	1642	1180	477	2026	10238
1975-76	3828	1051	1580	1129	428	2150	10166
1976-77	3828	1043	1601	1079	431	2310	10292
1977-78	3776	991	1718	1143	452	2325	10405
1978-79	3491	876	1736	1115	439	2386	10043
1979-80	3383	835	1688	998	419	2411	9734
1980-81	3173	699	1640	965	377	2328	9182
1981-82	2980	630	1603	946	360	2242	8761
1982-83	2728	592	1550	823	345	2105	8143

Community College Enrollment Prospects

Previous experience and study of many public community colleges has demonstrated that when comprehensive programs are developed to meet a diversity of needs, it is reasonable to expect the full-time equated size of the enrollments to approximate a fourth to a third of the size of enrollments in grades 9-12 in the high schools. Various factors influence this ratio such as length of time the institution has been in existence, the number of part-time students attracted, the amount of tuition charged, the accessibility of other educational institutions and programs, density of population, scope of program and services offered, nature of physical facilities, philosophy of service held by staff and the administration, articulation with secondary schools, and previous post-high school attendance patterns of graduates. Recently other factors have begun to influence enrollments and they are (1) the increasing tendency of youth to travel or otherwise delay continuing their schooling and (2) the change in attitude of youth about the value of college level education. It is too soon to determine very accurately how much these trends will be reflected in public community college enrollments.

There is a difference between prospective or potential community college enrollments and predictions of actual enrollments which are expected to materialize. The former are indications of what the enrollment level ought or should be and the latter are informed guesses about what the enrollments will be. The actual enrollment which materializes in a new community college district will be under the potential in the beginning. Over time there is typically a gradual closing of the gap between actual and potential enrollments assuming conditions affecting enrollments are all developing in the best fashion. The length of time it takes a community college enrollment to approximate the potential varies. If programs develop on schedule, if well articulated and good guidance and counseling services develop, if the image created by the college is supportive and positive, and if an understanding exists throughout the district among residents in general about what the community college is, the types of programs and services offered, the conditions of admission and attendance, and the advantages and benefits it offers, the actual enrollment should approximate the potential in five to eight years. Enrollment forecasts here are potential enrollments just as have been previous forecasts.

Data on the residential distribution of students indicate that the primary area from which Longview Community College draws most of its students from within the MJCD is composed of Belton, Grandview, Hickham Mills and Lee's Summit. The areas of Raytown and Center are shared between Longview and Penn Valley Community Colleges. Enrollment at Penn Valley is predominantly from schools in the Kansas City, Missouri School District; and, enrollments at Maple Woods emanate within the MJCD predominantly from the North Kansas City area. Each of the three colleges enroll students from the Diocesan high school. We made the assumption that the share of total enrollment in grades 9-12 in Center, Raytown and the Diocese which could be counted on as a potential pool of students by each college would be equal to the proportion of students from those areas enrolled at each of the colleges during the past two years. That portion of 9-12 enrollments in those areas was added to the numbers of students in grades 9-12 in other schools of the area within the MJCD most served by each of the colleges. Thus, it was possible to determine the ratio of full-time equivalent enrollments at each college over the past four years to the numbers of youth in grades 9-12 in the service area. These ratios are shown in Table 23. These ratios take into account full-time and part-

TABLE 23

RATIO OF COLLEGE FTE ENROLLMENT TO ENROLLMENTS IN GRADES 9-12

Year	Longview	Maple Woods		Penn Valley	District
1969-70	8.8	11.6	9.7*	13.3	11.6
1970-71	12.8	16.5	13.7	13.8	13.9
1971-72	16.0	19.4	16.1	15.0	16.0
1972-73	16.3	19.0	15.8	15.7	16.4

*Adjusted to eliminate students outside the MJCD in excess of the level served by other colleges.

time day and evening enrollments of persons of all ages living in the MJCD, Missouri outside the MJCD and outside Missouri. As indicated above about 23 percent of the enrollment at Maple Woods is from Missouri outside the MJCD. The percent of Missouri residents outside the MJCD served by the other colleges is approximately 6 percent. If the Maple Woods enrollment including 23 percent from Missouri outside the MJCD is reduced to 17 percent, a level comparable to the average of the other colleges, then a more accurate picture appears in terms of extent to which each is attracting students from the MJCD. Inclusion of the large percentage of out of district students at Maple Woods without including the numbers of youth in grades 9-12 in the area from which they come to the base for the ratio gives a spurious picture of service. The ratios shown for the MJCD are thus affected, and they may be considered slightly on the liberal or high side. Data shown in Table 23 reveal that the Kansas City Metropolitan Junior College District is not now serving the total numbers of residents which it might reasonably be expected to serve. This is the prime reason for the discrepancy between actual enrollments which have materialized and earlier projections of potential or prospective enrollments.

Shown in Table 24 are (A) the FTE and (B) the head count enrollment ranges within which it is reasonable to expect the actual enrollments should fall. The conservative FTE enrollments are based on the assumption that the ratio to numbers of youth in grades 9-12 in the predominent service area would be .25, and the liberal estimate assumes a ratio of .33. The economic conditions in the Kansas City Metropolitan area and the existence of a relatively large proportion of residents in the MJCD who have completed some college are reasons to believe that, if all other conditions develop favorably, the actual enrollments would tend toward the liberal side of the projection. The projected number of enrollments from the area within the MJCD served primarily by Maple Woods Community College were attenuated slightly over a fifth to account for students who enroll and live in areas adjacent to the MJCD.

Several different assumptions were made about FTE enrollment as a percent of head count enrollment. To arrive at the estimated head count for Longview and Maple Woods Community Colleges the assumptions were made that conservative estimates would equate at 80 percent of head count enrollments and the liberal estimates would equate at 75 percent of head count. In both cases the assumption is made that there is greater potential for part-time enrollments than has been the case. Conservative head count estimates at Penn Valley Community College were made on an assumption that FTE would equate at 75 percent of head count and liberal estimates assumed that FTE would equate at 65 percent, a level not unusual in Metropolitan area colleges that serve increasing numbers of working adults on a part-time basis.

The conservative estimates shown in Table 24 are minimum levels of what the community college enrollments should be, the liberal estimates indicate a reasonable level of what the enrollments could be, and the middle of each range is our best estimate of the level which will be reached if conditions develop in the MJCD that were assumed as being basic to these projections. The potential FTE enrollment for the MJCD of approximately 14,000 in 1974-75 will decline to about 11,450 in 1980-81. A potential head count of 19,185 in 1974-75 will decline to approximately 15,601 in 1980-81.

TABLE 24

METROPOLITAN JUNIOR COLLEGE DISTRICT ENROLLMENT PROSPECTS

Year	Longview		Maple Woods		Penn Valley		District	
	Conservative	Liberal	Conservative	Liberal	Conservative	Liberal	Conservative	Liberal
A. Full-Time Equivalent								
1973-74	3860	5147	2301	3068	5806	7741	11967	15956
1974-75	3927	5235	2359	3145	5714	7619	12000	15999
1975-76	3996	5328	2384	3178	5544	7392	11924	15898
1976-77	4020	5360	2407	3209	5356	7141	11783	15710
1977-78	3966	5288	2400	3200	5083	6777	11449	15265
1978-79	3859	5145	2343	3124	4764	6352	10966	14621
1979-80	3682	4909	2262	3016	4455	5940	10399	13865
1980-81	3437	4582	2197	2930	4179	5572	9813	13084
B. Head Count								
1973-74	4825	6863	2876	4090	7741	11909	15442	22862
1974-75	4909	6980	2949	4193	7618	11722	15476	22895
1975-76	4995	7104	2980	4237	7392	11372	15367	22713
1976-77	5025	7147	3009	4279	7141	10985	15175	22411
1977-78	4957	7051	3000	4267	6777	10426	14734	21744
1978-79	4824	6860	2929	4165	6352	9772	14105	20797
1979-80	4603	6545	2827	4021	5940	9138	13370	19704
1980-81	4296	6109	2746	3907	5572	8572	12614	18588

Peak Enrollment Potential

From data presented in Table 24, one can see that the expected peak head count enrollment for Longview and Maple Woods Community Colleges is for the year 1967-77. For Penn Valley Community College the peak is now and in the year 1973-74. The declining metropolitan core area residential population is reflected in the enrollment potentials at Penn Valley.

If at Longview, 70 percent of the head count enrollment is during the day, there will be in 1976-77 a peak potential head count day enrollment of 3500-5000 students, and by the year 1980-81 a day head count of 2460-3500 can be expected. If at Maple Woods, 64 percent of the head count enrollment is during the day, there will be in 1976-77 a peak potential head count day enrollment of 1925-2740 students, and by the year 1980-81 a day head count enrollment of 1760-2500 can be expected. If at Penn Valley, 60 percent of the head count enrollment is during the day, there will be in 1980-81 a potential day head count enrollment of 3340-5140, a decline from the 1973-74 potential day head count enrollment of 4640-7140. Since for planning purposes, the peak enrollment to be accommodated is of primary concern, the day-evening, part-time, full-time enrollments have not been shown for each of the other years.*

At Longview, if in 1976-77 80 percent of the FTE enrollment is during the day, there will be a peak of 3,722 full-time equivalent students, and in 1980-81 the number would be 3,207 students. The FTE enrollment at Maple Woods in 1976-77 would be 2,246 if 80 percent of the FTE enrollment was in the daytime and by 1980-81 the number would be 2,050 FTE students. The daytime FTE potential at Penn Valley will be 4,741 students in 1973-74 if 70 percent of the FTE enrollment is in the daytime. In 1980-81, FTE enrollment will be 3,412 students.*

In 1970, there were 11 head count community college students per 1,000 total district residents. With improvements in services and continued expansion of programs a reasonable level of service to be anticipated would be 13 head count students per 1,000 residents. When differences in expected population increase are taken into account between 1970-1980 and 1970-2000 and on the assumptions that head count would equate to full-time students at 70 percent, and 80 percent would be day students, it is found that facilities would be adequate in 1980-81 if designed to accommodate peak day enrollments would be needed for 3,500 FTE at Longview, 2,500 FTE at Maple Woods, and 5,000 FTE at Penn Valley. Based upon expected population growth as forecast now by the Mid-America Regional Council, after 1980 and before the year 2000, additional facilities would be needed at Maple Woods College to accommodate an additional 1,500 FTE day enrollments. Other facilities are expected to be adequate.

---

*These projections are based on a reasonable level of service anticipated if conditions change to generate enrollments consistent with potential. These estimates assume that the service level will approximate .290 instead of the present .164 ratio of youth in grades 9-12.

Comparison of Enrollment Forecasts

Table 25 contains data from three enrollment projections for comparative purposes. It can be seen that earlier head count projections of enrollments based upon historical trends of increasing birth rates, school enrollments, and population growth exceed by a considerable margin those projected in this study which reflect more recent trends. The earlier projections assumed a student enrollment mix where there would be far larger numbers of persons enrolled part-time than has been the case or than is typically the case unless the college setting is in an area which is highly industrialized with manufacturing. The MJCD projections relate to actual enrollments expected to occur at a reasonable rate from present actual enrollment levels, within the context of present conditions and constraints. It can be noted that the predictions of actual enrollments are below the potential enrollments which it is reasonable the District could develop.

TABLE 25

COMPARISON OF ENROLLMENT FORECASTS FOR MJCD

	ADL Current[1]		ADL Previous[2]		MJCD Forecasts[3]	
Year	Head Count	FTE	Head Count	FTE	High Head Count	High FTE
1973-74	19152	13961	14581	8962	9947	7936
1974-75	19185	14000	16696	10204	10396	8294
1975-76	19040	13911	18336	11151	10766	8589
1976-77	18793	13746	20458	12386	11107	8861
1977-78	18239	13357	22632	13650	11483	9161
1978-79	17451	12793	24971	15014	--	--
1979-80	16537	12132	26856	16092	--	--
1980-81	15601	11448	--	--	--	--

[1] Estimates of enrollment potential based on the mid-point of range between conservative and liberal estimates.

[2] Arthur D. Little, Inc., A Development Program for Metropolitan Junior Colleges - Kansas City, Volume Two, Guidelines for Development, 1968. P.35.

[3] MJCD office of educational Development and Research, "Enrollment Projection Study: 1973-1974," November, 1972, pp. 7-8.

CHAPTER IV

STATUS OF THE METROPOLITAN JUNIOR COLLEGE DISTRICT

Introduction

Data on the status of the Metropolitan Junior College District development are presented in this chapter. Data are presented on philosophical foundations, organization and staffing, curriculum, student personnel services, community services, financing, physical facilities, and enrollments. The purpose is to provide a base for the development of guidelines for future development.

Philosophical Foundations

The broad philosophical framework for the development of educational programs and services in the Metropolitan Junior College District is provided in objectives adopted by the Board of Trustees. They are as follows:

> To serve the educational needs of each area within the District as well as provide a well-coordinated and administered program for the total 400-square-mile district.
>
> To provide equal accessibility to colleges for residents of the district.
>
> To meet the differing educational needs of the various communities located within the district.
>
> To provide for the increased enrollment of those seeking post-secondary education in colleges of reasonable and functional size.
>
> To provide at least two years of college work suitable for transfer to four-year colleges and universities.
>
> To provide each student with the opportunity to discover and choose a curriculum suited to his interests and abilities.
>
> To provide career training both before and during employment.
>
> To provide comprehensive outreach and other community service programs for the various communities served by the district.

> To provide a broadly-based program aimed at the development of the educated person who can make appropriate applications in the world - of what he learned in class.
>
> To provide the student with further opportunity for personal growth as a member of a democratic society.

Within the scope of these district-wide objectives, the educational task of each college has been defined through the development and statement of specific objectives. These statements of objectives at both the college and district level are typical of those for public comprehensive community colleges throughout the country that have done a good job of defining the educational tasks to be accomplished. These statements embody the educational functions of (1) collegiate transfer, (2) occupational education (collegiate transfer, specialized job entry preparation, and job upgrading and retraining), (3) general education, (4) guidance and counseling, (5) community services, and (6) salvage. Commitment is made to serving persons of all ages throughout the district, youth and adults alike, by an "open door" admissions policy and under conditions which foster equalization of geographical and financial accessibility through programs and services geared to differing educational needs of the various communities within the district. Commitment is made to salvaging human resources through giving a second chance to persons who may have had previous academic difficulty and by the provision of basic and remedial education and other assistance designed to foster student success.

Organization and Staffing

The Metropolitan Junior College District consists of a central administrative unit and three community colleges, one located in the northern portion of the district (Maple Woods), one located in the central city portion (Penn Valley) and one located in the southern portion (Longview). The chief administrative officer for the district is a chancellor who is directly responsible to a six member Board of Trustees elected by qualified voters residing in the district. Three are from within Kansas City: the other three are from outside.

The basic premises and philosophy of organization within the district were established by action of the Board of Trustees. In order to serve the educational needs of each area within the district through a well coordinated and administered program for the total 400 square-mile district, to equalize educational opportunities through effective accessibility of the colleges to residents of the district, to meet effectively the differing educational needs of the various communities located within the district, to accommodate increased enrollment in the district in colleges of reasonable and functional size, the Board established the following organizational framework.

1. A district administrative organization "to provide a well-coordinated and administered program" under the direction of a chancellor who (1) is responsible for the total operations of the district, and (2) recommends general policies and regulations, including the annual budget, to the Board.

2. Longview, Maple Woods, and Penn Valley Community Colleges were to be developed to operate as instructional units of the district. In addition, the district may establish educational programs in locations within the district in extending educational and other opportunities to citizens.

3. Each college is to have a president who will (1) plan, organize, and direct activities of the college in pursuance of district policies and regulations as set by the Board of Trustees, and (2) be directly responsible to the chancellor who is the chief administrative officer of the district.

4. Business affairs of the three colleges are to be centralized under the direct supervision of the district office and subject to the budget adopted by the Board of Trustees on recommendation of the chancellor.

This basic organizational framework implies a commitment of the Board to the principle of developing a multi-college system with maximum autonomy for each college in orderly evolutionary fashion as rapidly as is possible. The organizational arrangement is shown in Figure 4.

In the 1972-73 school year the District staff consisted of a Chancellor, a Vice Chancellor, an administrative Assistant to the Chancellor, three Directors, and two Assistant Directors along with their support personnel and a Community Relations and Public Information Officer. The functional organizational chart for the Metropolitan Junior College District office is shown in Figure 5.

The Chancellor is the chief administrative officer and is responsible for implementation of policy approved by the Board of Trustees. The District office provides centralized administrative and personnel services, maintains relations with governmental agencies at all levels, business services (including payroll, campus bookstores, and purchasing), facilities planning, computer information processing services, and construction and maintenance services. Also provided are centralized production of instructional media, occupational program coordination and development, and institutional research services.

BEST COPY AVAILABLE

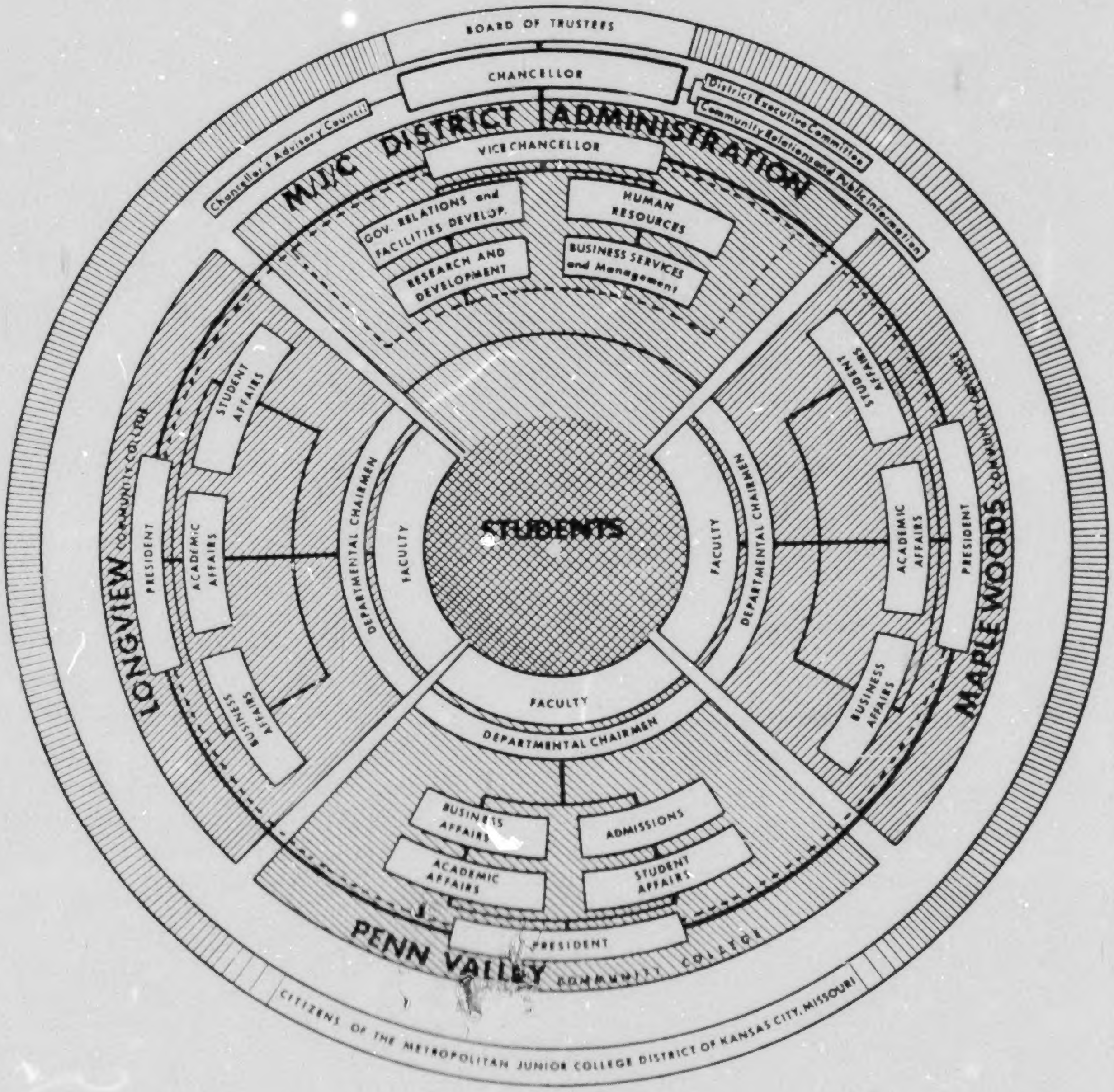

BOARD OF TRUSTEES
CHANCELLOR
District Executive Committee
Community Relations and Public Information
Chancellor's Advisory Council
MJC DISTRICT ADMINISTRATION
VICE CHANCELLOR
GOV. RELATIONS and FACILITIES DEVELOP.
RESEARCH AND DEVELOPMENT
HUMAN RESOURCES
BUSINESS SERVICES and Management
LONGVIEW COMMUNITY COLLEGE
PRESIDENT
STUDENT AFFAIRS
ACADEMIC AFFAIRS
BUSINESS AFFAIRS
DEPARTMENTAL CHAIRMEN
FACULTY
STUDENTS
FACULTY
DEPARTMENTAL CHAIRMEN
MAPLE WOODS COMMUNITY COLLEGE
PRESIDENT
STUDENT AFFAIRS
ACADEMIC AFFAIRS
BUSINESS AFFAIRS
FACULTY
DEPARTMENTAL CHAIRMEN
BUSINESS AFFAIRS
ADMISSIONS
ACADEMIC AFFAIRS
STUDENT AFFAIRS
PRESIDENT
PENN VALLEY COMMUNITY COLLEGE
CITIZENS OF THE METROPOLITAN JUNIOR COLLEGE DISTRICT OF KANSAS CITY, MISSOURI

FIGURE 4 METROPOLITAN JUNIOR COLLEGE DISTRICT ORGANIZATIONAL CHART, 1972-73

BEST COPY AVAILABLE

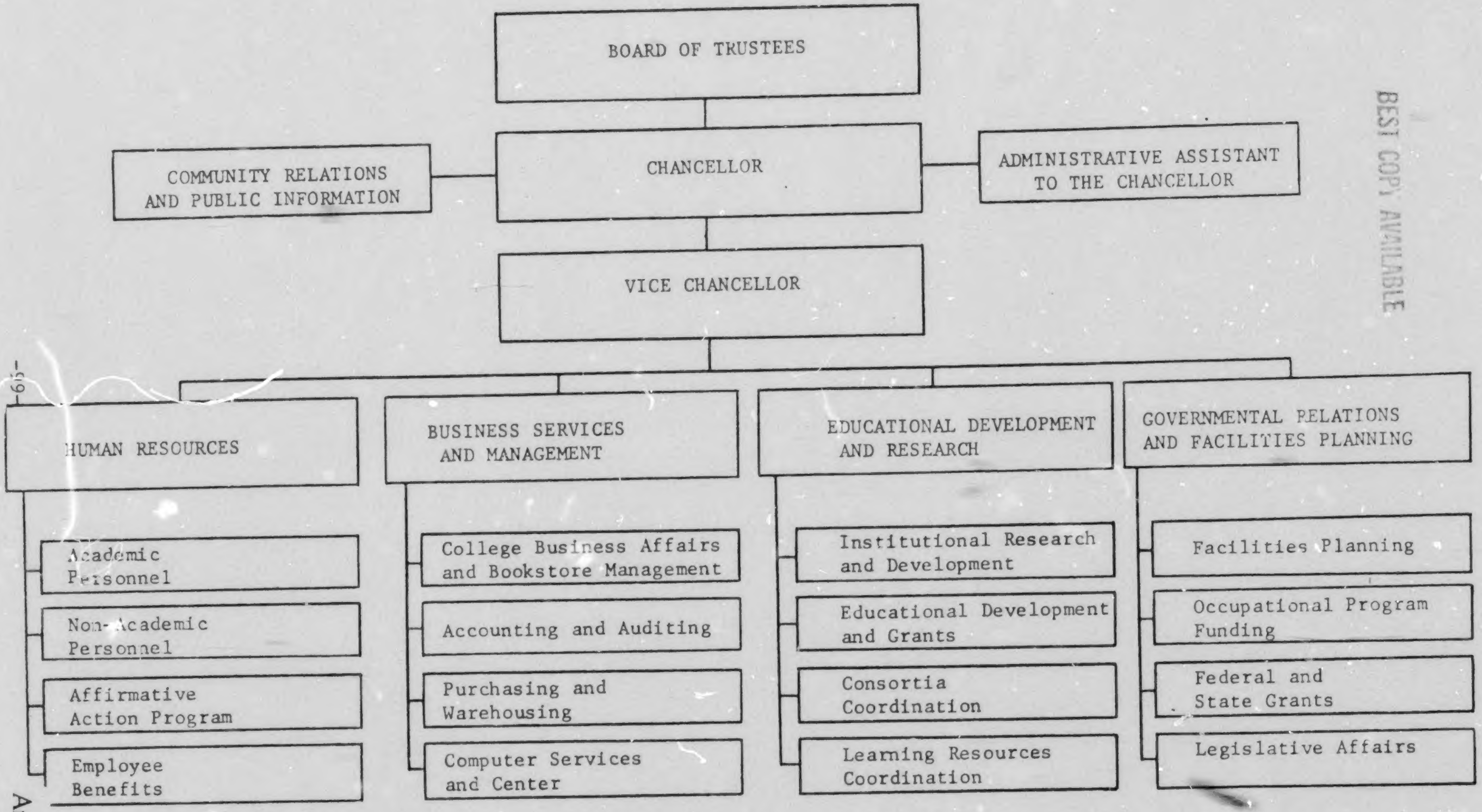

BOARD OF TRUSTEES
COMMUNITY RELATIONS AND PUBLIC INFORMATION
CHANCELLOR
ADMINISTRATIVE ASSISTANT TO THE CHANCELLOR
VICE CHANCELLOR
HUMAN RESOURCES
Academic Personnel
Non-Academic Personnel
Affirmative Action Program
Employee Benefits
BUSINESS SERVICES AND MANAGEMENT
College Business Affairs and Bookstore Management
Accounting and Auditing
Purchasing and Warehousing
Computer Services and Center
EDUCATIONAL DEVELOPMENT AND RESEARCH
Institutional Research and Development
Educational Development and Grants
Consortia Coordination
Learning Resources Coordination
GOVERNMENTAL RELATIONS AND FACILITIES PLANNING
Facilities Planning
Occupational Program Funding
Federal and State Grants
Legislative Affairs

FIGURE 5 DISTRICT LEVEL FUNCTIONAL ORGANIZATION CHART, 1972-73

The formal district level structure for involving various components of the system in the process of collecting information and formulating recommendations to assist the Chancellor in implementing policy established by the Board of Trustees consists of three committees and a council. They are the Executive Committee, the Chancellor's Council, the Instructional Coordinating Committee and the Student Personnel Services Committee. The Executive Committee constitutes the Chancellor's cabinet and consists of the Chancellor, Vice Chancellor and the three College Presidents. The Chancellor's Council is made up of the Executive Committee plus the District Directors and faculty representatives from the District Academic Senate and the local faculty association at each of the colleges. Its purpose is broadly informational and advisory. The Instructional Coordinating Committee chaired by the Vice Chancellor includes the academic administrators from the three campuses plus officers of the District Senate, faculty representatives from each college and a student representative from each college. Its function is to coordinate the instructional program among the three colleges. A fourth committee, the Student Personnel Services Coordinating Committee brings together the student personnel people of each college and is chaired by the Vice Chancellor. It functions to coordinate student personnel policies and procedures.

Other District level committees provide channels of communication for coordination and development of programs and services. A Community Relations Steering Committee provides for community in-put and reactions to district and College policy decisions, new programs and future plans. A Council on Occupational Education provides a monthly meeting of public and private institutions in the Metropolitan area concerned with the development and coordination of occupational programs.

At the district level, in addition to the administrative personnel mentioned above, the following personnel are employed.

12 Secretaries
1 Staff specialist
1 PBX operator/receptionist
1 Personnel technician
1 Controller
1 Payroll technician
1 Systems analyst-accountant
1 Internal auditor
1 Bookkeeper
1 Purchasing agent
1 Buyer
1 Stockroom clerk
1 Assistant Stockroom clerk
1 Financial secretary
1 Accounting clerk
1 Payroll clerk
1 Custodian
1 Security officer
1 Manager, computer services
1 Manager, bookstore
3 Keypunch operators
2 EDP technicians
4 Programmers
1 Programmer analyst
1 Systems analyst
3 Bookstore helpers
1 Research associate
1 Federal programs specialist
1 Facilities development engineer
1 Facilities development assistant

At the college level, as can be observed in Figure 4, personnel responsible for business affairs, academic affairs, and student affairs (and at Penn Valley Admissions) are directly responsible to the president.

Each is organized along departmental lines for implementation of the educational program. Besides the president, the following personnel are employed at each of the colleges.

1. Longview

3 Deans (business, academic & student affairs)
1 Assistant Dean, occup, educ.
63 Faculty
1 Librarian
1 Veterans advisory
1 Counselor - community services
1 Community services assistant
1 Counselor - student activities
1 Counselor/PREP
4 Counselors
1 Counselor/registrar
8 Secretaries
2 Clerks
1 Accounting clerk
1 Library clerk
1 Reading lab assistant
1 Automotive technology lab. assistant
1 Media services assistant
1 Testing specialist
1 Financial aids and placement assistant
1 Transcript analyst
1 Reference assistant
1 College nurse
1 Supervisor of buildings and grounds
1 Groundsman
2 Security officers
1 Maintenance assistant
2 Head custodians
3 Custodians
4 Assistant custodians
1 Food service hostess
1 Business aide
1 Bookkeeper
1 PBX operator

2. Maple Woods

3 Deans (business, academic & student affairs
1 Assistant dean-academic affairs
39 Faculty
1 Librarian
1 Counselor-student activities
1 Counselor/Registrar
2 Counselors
4 Secretaries
8 Clerks
2 Library clerks
1 Reference assistant
1 Media services specialist
1 Financial aids & placement assistant
1 Transcript analyst
1 Supervisor of buildings & grounds
1 Maintenance assistant
1 Assistant stockroom clerk
1 Groundsman
2 Custodians
2 Head custodians
2 Assistant custodians
1 Business aide
1 Food service hostess
2 Security officers

3. Penn Valley

1	Assistant to the President -- community services and Relations
1	Vice President - academic affairs
4	Deans (business affairs, admissions, student affairs, learning resources)
1	Assistant dean - occupational education
1	Assistant dean - continuing education
1	Assistant dean - learning resources
1	Assistant to dean (business affairs)
119	Faculty
2	Librarians
2	Special instructors (cont. educ.)
1	Learning lab specialist
1	Television media specialist
1	Key line artist
1	Media services specialist
2	Media production specialists
1	Media production technician
1	Teacher assistant
1	Reference assistant
2	Science lab assistants
1	Reading lab assistant
1	Data processing lab assistant
9	Counselors
1	Placement counselor
2	Job coaches
1	Job supervisor
2	Project coordinators (occup. educ.)
1	Financial aids assistant
1	Special services advisor
21	Secretaries
8	Clerks
6	Library clerks
1	Media clerk
1	Accounts receivable clerk
1	PBX operator
1	Receptionist (admissions)
1	Transcript analyst
1	College Nurse
1	Campus center supervisor
1	Financial specialist
1	Superintendent of buildings and grounds
1	Groundsman
1	Maintenance foreman
1	Maintenance assistant
1	Head custodian
11	Assistant custodians
1	Operating Engineer
1	Food service hostess
1	Manager (occupational education)
1	Manager (learning resources office)
6	Security officers

Observing the staffing patterns of the three colleges one can detect differences in types and numbers of academic and nonacademic personnel employed, although there is considerable similarity at the administrative levels. These data are presented to illustrate differences which reflect variations in size, programs and services developed and emphasis. They will also serve as a basis for examining extent to which staffing patterns reflect functions to which the district is committed as well as to provide a basis for judging the numerical adequacy of certain types of personnel.

Curriculum

In keeping with the goals of serving the differing educational needs of the various communities and providing each student with the opportunity to discover and choose a curriculum suited to his interests and abilities each college has continued to develop occupationally related educational programs. These programs are designed to prepare graduates for entry and successful performance in jobs at the technical and semi-professional (middle manpower) levels. Ten occupational education programs were offered in 1967-68, 18 were offered during the fall 1971, and during the spring 1973, there were enrollments in 40 programs.

Recent trends in program composition of enrollments at each of the colleges and for the District are presented in Table 26. One can see, for example, that of all students enrolled full-time during the fall 1971 at Longview College, 44.3 percent were in collegiate transfer programs, 22.7 percent were in occupationally related programs, and 33 percent were special or unclassified students. Of all full-time students 8.6 percent were in business related programs, 3.5 percent were in data processing technology, 1.6 percent were in allied health and medical technologies, 6.6 percent were in engineering and industrial technologies, and 2.4 were in public service related programs. The rest of Table 26 is to be read in similar fashion.

Observing the data one can determine that during the spring 1973, percents of full-time students enrolled in occupational programs were 28.5, 30.9, and 33.6 percent, respectively, at Longview, Maple Woods and Penn Valley Colleges. Slightly over 31 percent of all full-time students enrolled in the Metropolitan Junior Colleges were in occupational programs. The largest percentages were in business related programs at Longview, in engineering and industrial technology at Maple Woods, and in allied health and medical technologies at Penn Valley. One can determine also that percentages of students enrolled part-time during the same period in occupational education programs were 27.3, 36.8, and 32.8, respectively, of total part-time enrollments at Longview, Maple Woods, and Penn Valley. The percentages of enrollments in occupational education and collegiate transfer programs during the recent spring terms are less than for fall terms. Percentages of special/unclassified students are higher during spring terms.

Presented in Table 27 are full-time equated enrollments by programs offered at each of the colleges during the spring 1973.[1] These data show not only the scope of offerings throughout the District but also the distribution of programs among the three colleges and the numbers of students attracted. While some programs such as in the business occupational field are provided at each of the colleges, others such as allied health and medical technologies, some public service related programs, automotive technology, aviation maintenance, and electronics are located at one college.

---

[1] Computer printouts provided by the Metropolitan Junior College District, Spring, 1973.

TABLE 26

PROGRAM COMPOSITION OF ENROLLMENTS BY PERCENT

Type of Program	Fall 1971 Full	Fall 1971 Part	Spring 1972 Full	Spring 1972 Part	Fall 1972 Full	Fall 1972 Part	Spring 1973 Full	Spring 1973 Part
1. Longview								
Collegiate Transfer	44.3	30.8	72.4	71.4	62.4	39.0	63.3	38.8
Business Related	8.6	11.7	6.0	3.5	11.3	12.9	10.3	10.3
Data Processing Tech.	3.5	4.6	.7	1.2	4.0	2.3	4.0	2.9
Allied Health & Medical Tech.	1.6	2.0	3.6	1.1	.2	0.0	.6	.4
Engineering & Industrial Tech.	6.6	5.1	9.4	6.2	9.0	10.1	9.4	9.0
Public Service Related	2.4	3.2	2.3	1.6	3.8	4.1	4.3	4.7
Total Occupational	22.7	26.6	22.0	13.6	28.3	29.4	28.5	27.3
Total Special/Unclassified	33.0	42.7	5.6	15.0	9.4	31.6	8.2	33.9
2. Maple Woods								
Collegiate Transfer	39.7	31.5	33.3	24.6	66.1	43.8	56.1	36.1
Business Related	8.5	9.9	6.6	6.0	11.3	21.0	13.1	21.6
Data Processing Tech.	1.4	1.6	.1	1.1	.6	1.5	.1	2.0
Allied Health & Medical Tech.	2.2	3.5	.7	2.7	.4	1.4	.6	2.1
Engineering & Industrial Tech.	9.3	5.5	8.6	4.4	14.5	8.1	13.8	5.1
Public Service Related	3.5	3.8	1.6	2.2	3.9	4.7	3.2	6.0
Total Occupational	24.9	24.2	17.6	16.5	30.7	36.7	30.9	36.8
Total Special/Unclassified	35.4	44.3	49.1	58.3	3.2	19.5	13.0	27.1
3. Penn Valley								
Collegiate Transfer	45.0	34.3	41.4	24.2	60.0	56.4	61.2	54.6
Business Related	9.4	9.8	5.9	5.0	8.0	9.3	8.6	9.3
Data Processing Tech.	5.4	5.7	2.5	3.5	4.9	5.2	3.3	5.4
Allied Health & Medical Tech.	8.3	7.2	13.0	6.7	17.2	8.2	15.3	8.8
Engineering & Industrial Tech.	1.9	1.0	1.1	1.5	2.4	2.1	2.0	2.5
Public Service Related	2.2	2.8	2.0	4.0	3.7	6.8	4.3	6.9
Total Occupational	27.2	26.4	24.6	20.8	36.1	31.6	33.5	32.8
Total Special/Unclassified	27.9	39.3	34.0	55.0	3.9	12.0	5.2	12.5

TABLE 26

PROGRAM COMPOSITION OF ENROLLMENTS BY PERCENT
(Continued)

Type Program	Fall 1971		Spring 1972		Fall 1972		Spring 1973	
	Full	Part	Full	Part	Full	Part	Full	Part
			4. MJCD					
Collegiate Transfer	43.6	33.0	50.2	35.7	61.9	49.2	60.9	47.3
Business Related	8.9	10.3	6.1	4.8	9.7	12.0	10.1	11.3
Data Processing Tech.	3.9	4.7	1.4	2.6	3.8	3.7	2.9	4.2
Allied Health & Medical Tech.	4.7	5.3	7.5	4.7	8.2	4.7	7.7	5.4
Engineering & Industrial Tech.	5.1	2.8	5.4	3.1	6.9	5.5	6.7	4.8
Public Service Related	2.5	3.1	2.0	3.1	3.8	5.7	4.1	6.1
Total Occupational	25.1	26.1	22.4	18.3	32.4	31.9	31.4	31.7
Total Special/Unclassified	31.2	41.0	27.5	46.0	5.7	18.9	7.7	21.0

TABLE 27

FTE ENROLLMENT BY PROGRAM AT EACH COLLEGE SPRING 1973

	Longview		Maple Woods		Penn Valley		Total	
Occupational Programs	Fresh.	Soph.	Fresh.	Soph.	Fresh.	Soph.	Fresh.	Soph.
Business related								
Accounting	11	2	17	2	27	4	55	8
Business	94	34	104	23	74	14	272	71
Coop.Steno.	31	13	4	0	6	0	41	13
Coop.Steno. (Cert)	2	2	16	2	7	0	25	4
Secretarial Science	36	4	47	9	127	14	210	27
Hotel/Rest.Mgmt.	0	2	0	0	69	13	69	15
Rest.Fd Serv Mgmt (Cert)	0	0	0	0	3	1	3	1
Mid-Mgmt (Bnk,Ins. & Fin)	5	5	12	2	41	8	58	15
Mid-Mgmt (Marketing)	35	20	3	0	27	7	65	27
Data Processing Technologies								
Data Processing	71	32	12	3	154	59	237	94
Key Punch (Certificate)	0	0	0	0	4	0	4	0
Allied Health and Medical Technologies								
Dental Assisting	2	0	1	0	75	9	78	9
Dental Health Technician	0	0	0	0	2	0	2	0
Dental Lab Technology	0	0	0	0	0	0	0	0
Dietetic Technician	1	0	0	0	27	2	28	2
Inhalation Therapy	1	0	2	0	77	34	80	34
Medical Lab Technology	0	0	0	0	7	4	7	4
Medical Rcrds Technology	1	0	0	0	28	6	29	6
Mid-Mgmt Health Services	0	0	0	0	0	1	0	1
Nursing ADN	6	0	10	0	170	59	186	59
Nursing LPN	0	0	0	0	2	0	2	0
Nursing Diploma Program	5	0	3	0	10	1	18	1
Nursing Home Technology	0	0	0	0	4	0	4	0
Mental Health Aide	0	0	0	0	0	0	0	0
Physical Therapy Asstnt	1	0	3	0	42	5	46	5
Radiologic Technology	0	0	0	0	42	6	42	6
Medical Assistant	0	0	0	0	0	0	0	0
Occupt. Therapy Asst.	0	0	0	0	0	0	0	0
Operatng Room Technology	0	0	0	0	0	0	0	0
Unit Management	0	0	0	0	0	0	0	0
Urology Technology	0	0	0	0	0	0	0	0
Hospital Administration	0	0	0	0	0	0	0	0
Engineering and Industrial Technologies								
Architectural Technology	4	3	2	0	0	2	6	3
Auto Technology	83	32	1	0	2	0	86	32
Auto Technology (Cert)	1	0	0	0	0	0	1	0
Aviation Maint. Tech.	1	0	23	11	1	0	25	11
Powerplant (Cert)	0	0	3	2	0	0	3	2

TABLE 27

FTE ENROLLMENT BY PROGRAM AT EACH COLLEGE SPRING 1973
(Continued)

	Longview		Maple Woods		Penn Valley		Total	
Occupational Programs	Fresh.	Soph.	Fresh.	Soph.	Fresh.	Soph.	Fresh.	Soph.
Engineering and Industrial Technologies (cont'd)								
Airframe (Cert)	0	0	2	0	0	0	2	0
Cartographic Technology	0	0	0	0	0	0	0	0
Drafting	19	11	1	0	28	8	48	19
Electronic Technology	1	3	88	17	3	0	92	20
Engineering Technology	11	3	0	0	4	2	15	5
Manufacturing Technology	7	3	0	0	1	0	8	3
Mid-Mgmt Industrial	43	37	0	0	44	8	87	45
Mid-Mgmt Petrlum Mrkting	0	0	0	0	0	0	0	0
Environmental Control	0	0	0	0	2	0	2	0
Industrial Science	0	0	0	0	0	0	0	0
Construction Technology	0	0	0	0	0	0	0	0
Traffic Engineering Tech	8	4	0	0	0	0	8	4
Electro-Mech Tech	0	0	0	0	2	0	2	0
Electro-Mech Tech (Cert)	0	0	0	0	0	2	0	2
Mechanical Technology	0	0	0	0	1	0	1	0
Mech Technology (Cert)	0	0	0	0	2	0	2	0
Climate Control Tech	0	0	0	0	2	1	2	1
Climate Con. Tech. (Cert)	0	0	0	0	2	0	2	0
Aviation Pilot Trng	0	0	2	0	6	3	8	3
Public Service Related								
Administration of Justice	95	40	56	11	94	18	245	69
Early Childhood Ed	0	0	0	0	56	9	56	9
Home Economics	0	0	0	0	6	3	6	3
Early Childhood Ed (Cert)	0	0	0	0	8	2	8	2
Fire Science	2	0	6	0	39	14	47	14
Fire Science (Cert)	0	0	0	0	6	2	6	2
Fd Ser Supervision (Cert)	0	0	0	0	0	0	0	0
Social Service Asst	0	0	2	0	23	7	25	7
Social Serv Asst (Cert)	0	0	0	0	7	0	7	0

The percentage distribution of head count enrollments by major program category during the spring semester were: Business - 34.1 percent; Data Processing - 11.5 percent; Allied Health and Medical Technologies - 20.1 percent; Engineering and Industrial Technologies - 17.7 percent; and Public Service Related - 16.6 percent.

1. Community Services in the MJCD

An effort was made to obtain the names, or titles, of community services offered by college during each term, Fall, 1971 to Fall, 1972, inclusive.

During this period Longview College reported offering 92 individual non-credit classes in ten locations, including the campus. There was a total of 1,400 enrollments. A variety of courses offered can be classified as (1) arts and crafts, (2) business and secretarial, (3) trade and industrial, and (4) self-improvement activities. Certain courses, a minority of those offered, can be equated to the college credit hour for credit purposes should the individual ever enroll as a regular student on campus for work toward a degree. These outreach activities were supplemented by the conduct of five seminars or workshops, two group study programs for area teachers of social studies, and assistance with the Mundialization Program.

Procedures used in developing these community services included the following:

1. One-page check-list surveys of people in community organizations such as study clubs and civic organizations.
2. Word of mouth--talking with residents to determine courses and activities of benefit.
3. Close work with some public school administrators in feeder schools to profit by their experiences.
4. Surveying and talking to students presently enrolled in non-credit continuing education classes about additional courses and/or activities of interest.
5. Receive requests for specific courses from community residents who telephone the college.
6. Newspaper releases and continuing education brochure distribution offering to provide courses other than those listed on the basis of sufficient interest prompt citizens to make direct requests to the college.
7. Advisory Committees of Citizens are always used and when necessary or advisable, faculty personnel and student representatives may participate.
8. A committee of faculty members on the college campus receive requests, approve activities, and give feedback to the Office of Community Services.

9. Certificates of completion are issued to students who merit them. They become added publicity and incentive to others.

Maple Woods College expresses a willingness to offer courses at locations off campus as part of its commitment to serving the community. In the Spring semester, 1972, a course was offered in business communication. Some evening courses in administration of justice have been offered at the Gladstone Fire Station, primarily for policemen and firemen. During the Fall, 1972, a course was offered in criminal justice enforcement and in introductory sociology (enrollment 60 students). Besides the offering of these several courses, other activities have included:

1. Demonstrations to the public by art students and faculty
2. Live theater performances in area grade schools
3. Children's Theater during summer months
4. Participation of residents and students in Maple Woods Community Theater
5. College hosted Employment Development conferences, a Youth in Politics conference, a Missouri State Soil Conservation meeting, and a Marine Corps fitness contest for boys
6. Small business seminars were coordinated and publicized
7. Public forum held for political speakers
8. Job Bank implemented
9. Administer GED examinations and provide counseling for testees.
10. Campus used for camping by Boy Scouts and other groups. Campus used for nature and environmental study groups.
11. Class study project provided information to developers, builders, residents, etc. on number of apartments and multi-family dwellings and need and cost of housing.

Between the Fall, 1971 and Summer, 1972, Penn Valley College offered 16 community service courses on campus and at three off campus locations. Special programs were provided at the Career Center.

2. Community Services

Because the function of community services is not well understood and is thought to be different things by different persons, it is helpful to develop usable definitions for categories of services. Perhaps no facet of community college operation is more ill-defined than community services. After analyzing responses from 192 staff members of community college community services programs Gunder Myran developed a definition that community services are "...those action programs of the college, undertaken independently or in cooperation with other community groups and agencies, which direct the educational resources of the college toward serving individual, group, and community needs."[1]

There are three major types of activity in community services programs: (1) those activities designed to assist community members who are seeking individually or through informal groups to improve their own lives; (2) those activities designed to assist existing community organizations in establishing cooperative alliances to improve the physical, social, economic, and political environment of the community (e.g., housing, transportation, air pollution, public safety, sanitation, human relations, etc.) to meet communitywide needs; and (3) those activities designed to procure or coordinate the human and material resources required to implement an effective program. In short, a comprehensive community services program concerns itself with Individual Development, Community Development, and Program Development in an area that includes the campus but extends well beyond it. In a sense all activity of a community college, including the offering of all degree and certificate programs can be broadly interpreted as community services. Operationally, there has been an increasing practice of separating the administration of short courses, seminars, workshops, clinics, lectures, concerts, art displays, consultations, social action or community studies programs from the administration of degree and certificate programs. Courses offered for credit on the campus may be classed as part of the instructional function of a college; whereas, when some of the same courses are made available throughout the service area under other conditions, the activity may be more properly classed as part of community services. Some institutions include collegiate courses offered to adults and youth during the evening hours and at locations other than in regular instructional facilities within the community services framework and others regard these offerings administratively as part of the degree and certificate programs. We recommend the former concept and inclusion as part of the "Educational Extension" category of community services. All other types of community service activity typically result in no credit for the participants. Categories of community services are described below.

---

[1] Community Services in the Community College, Washington, D.C., The American Association of Junior Colleges, p. 12.

A. Community Services for Individual Development

Community Guidance - Providing community members with opportunities for self-discovery and development through individual and group counseling processes; e.g., aptitude-interest testing, individual interviews, career information, job placement, family life, etc.

Educational Extension - Increasing the accessiblity of the regular courses and curricula of college by extending their availability to the community-at-large; e.g., evening classes, TV courses, "weekend college," neighborhood extension centers.

Educational Expansion - Programming a variety of educational, upgrading and new career opportunities which reach beyond the traditional limitations of college credit restrictions; e.g., institutes, seminars, tours, short courses, contractual in-plant training, etc.

Social Outreach - Organizing programs to increase the earning power, educational level, and political influence of disadvantaged; e.g., ADC mothers, unemployed males, educationally deprived youth, welfare recipients, etc.

Cultural Development - Expanding opportunities for community members to participate in a variety of cultural activities; e.g., fine art series, art festivals, artists in residence, community theatre, etc.

Leisure Time Activity - Expanding opportunities for community members to participate in a variety of recreational activities; e.g., sports instruction, outdoor education, summer youth programs, senior citizen activities, etc.

B. Community Services for Community Development

Community Analysis - Collecting and analyzing significant data which reflect existing and emerging needs of the community and which can serve as a basis for developing the community service educational program of the college; e.g., analyzing census tracts, analyzing manpower data, conducting problem oriented studies, identifying roles and goals of organizations, etc.

Inter-agency Cooperation - Establishing adequate linkage with related programs of the college and community to supplement and coordinate rather than duplicate existing programs; e.g., calendar coordination, information exchange, joint committee work, etc.

Advisory Liaison - Identifying and involving (in an advisory capacity) key members of the various sub-groups with whom cooperative programs are being planned; e.g., community services advisory council, ad hoc advisory committee, etc.

Public Forums - Developing activities designed to stimulate interest and understanding of local, national and world problems; e.g., public affairs pamphlets, "town" meetings, TV symposiums, etc.

Civic Action - Participating in cooperative efforts with local government, business, industry, professions, religious and social groups to increase the resources of the community to deal with major problems confronting the community; e.g., community self-studies, urban beautification, community chest drives, air pollution, etc.

Staff Consultation - Identifying, developing, and making available the consulting skills of the faculty in community development activities; e.g. consulting with small businesses, advising on instructional materials, designing community studies, instructing in group leadership, laboratory testing, etc.

C. Community Services for Program Development

Program Management - Establishing procedures for procuring and allocating the physical and human resources necessary to implement the community services program; e.g., staff recruitment, job descriptions, budgetary development, etc.

Public Information - Interpreting programs and activities of community services to the college staff as well as to the community-at-large and coordinating releases with the central information services of the college.

Conference Planning - Providing professional assistance to community groups in the planning of conferences, institutes and workshops; e.g., registration procedures, program development, conference evaluation, etc.

Professional Development - Providing opportunities and encouragement for staff members to up-grade their skills in program development and evaluation; e.g., professional affiliations, exchange visitations, professional conferences, advanced graduate studies, etc.

Facility Utilization - Encouraging community use of college facilities by making them readily accessible by facilitating the scheduling process, and by designing them for multi-purpose activities when appropriate; e.g., campus tours, centralized scheduling office, conference rooms, auditorium design, etc.

Program Evaluation - Developing with the staff the specific objectives of the program, identifying sources of data, and establishing procedures for gathering data to appraise the effectiveness of various facets of the program; e.g., participant ratings, attendance patterns, behavioral changes, program requests, etc.

3. Nature of Community Services

The community services dimension of the community college function derives its legitimacy as does the institution itself from its educational role. A college is not after all a governing agency, a social welfare agency, a museum, a social club, an institution of religion, a voluntary association, an employment agency, a theater, or a labor union. Colleges are educational institutions. Community services are legitimate only to the extent they represent an extension or expansion of the educational resources directed toward the economic, social, cultural, and civic needs of the people the college serves. The college cannot always be a "prime mover" for change and its role may often be a coordinative or supportive one. It will sometimes need to assume a "partnership" role in reference to personal and community development. A major reason is that educational approaches may constitute only one component in such development. As mentioned before, colleges may not possess all the human, financial, or physical resources. Furthermore, persons directly involved may perceive the resources of the colleges as relevant only to selected aspects of their problem.

There does not exist anywhere a singular listing of specific services which should be provided by a community college. There have been studies to inventory the specific types of service activities which were being sponsored, but no list of services developed would be applicable to any specific community. A compilation of services provided in one community would not be applicable per se in any other community. The nature and scope of community services is dictated by the particular environment in which a community college is located. Furthermore, there can never be a standard set or identified group of community services which should be implemented once and for all time in any community. Changing societal and economic conditions in an area may mean that those services which are found appropriate for 1973 are likely to be substantially different from those which will be appropriate in 1980 or 1985. It is possible to state with some degree of confidence what programs, courses, and activities are carried on in the name of community services today, but one can only speculate on what the nature and scope of these services will be ten years hence. A comprehensive and effective program of community services as implied by the categories listed above is considerably broader and more encompassing than just the provision of courses at the times and in the places where people can attend.

Problems related to technological advance, race, poverty, urban renewal, and the like have mandated a broadening of the public college mission to provide a more comprehensive base for the development of human resources in the community. Metropolitan based community colleges are being challenged to move outside their doors "where the action is." To meet this challenge involves greater penetration of the college into the life of the community and greater participation of the community in the life and concerns of the college. The degree of responsiveness of the college and the presence of people and mechanisms to identify, analyze, and attack community problems have a direct relationship to total community support.

The community services program, by drawing upon its role as college-community liaison and catalyst, can provide the impetus needed for the college to focus on institutional redirection,so part of its impact will be to make the community a better one. The specific community services needed are best determined over considerable periods of time through a mechanism established by the college for penetrating the life of the community and for extensive involvement of people in the process. It takes a continuous on-going effort by college personnel over time to accomplish the identification of services needed and to detect evolving need which can be dealt with properly. Cooperative action arrangements which enable the college to relate to the community and the community to the college are essential for this purpose. The scope of community services provided by any college is a function of both operating policies which relate to the role of the college in the community and to the degree and type of linkage established for interrelating the college to the life of the community.

4. Rationale for Community Services Program Development

In a bureaucratic society such as ours, organizations have the responsibility for meeting most of the functional requirements: economics, education, religion, law, and government. All the many organizations to be found in any community exist in an interorganizational environment. According to one authority, "Not only are organizations dependent upon this interorganizational environment of society for their existence, the growth and/or decline of society is a function of the interrelationship found to exist among and between organizations comprising that society."[1]

Public community colleges operate in an interorganizational environment, and this is the milieu of the community services staff. Linkages throughout this environment are essential for the effective development of a program of community services. They determine the quality of interaction between the college and the community. Community services may be viewed as what the college does in cooperation with other community organizations and groups rather than unilaterally in response to specific community needs. Colleges usually lack the resources necessary to directly tackle all but the most superficial of community needs and they lack the social license to play an extended role. It is expected that resources allocated to a college will be used primarily for providing certificate and degree programs and certain supportive programs such as business services, student personnel services and administrative services. Colleges do not have social license to use these resources for a unilateral frontal attack on problems which require responses other than an educational one. That is why a college's greatest strength in having impact upon community problems lies in its ability to work cooperatively, through a community services structure, with other community organizations and groups which can also contribute human and physical resources. The college role can best be one of increasing capabilities of persons both effectively and cognitively to cope with problems and to assist in the application of knowledge to community problems.

---

[1] Robert Anderson, A Sociometric Approach to the Analysis of Interorganizational Relationships. East Lansing: Continuing Education Service, Michigan State University, 1968, p. 1.

We recognize the value of the community college as a catalytic agent or coordinator in the community in relation to other community groups; however, this role cannot and must not be assumed as the exclusive role. There are scores of coordinating groups which have been around a while and they are not just sitting around agreed among themselves as to what the problems or solutions are and just waiting to be coordinated. The college will obviously work more closely with some community organizations than others in carrying out its programs. The closest linkage is likely to be with other educational agencies: public schools, libraries, museums, colleges and universities. Linkage will also exist with groups for whom educational objectives are secondary, such as churches, drama and art societies, business and industry, the courts, public employment agencies, professional groups, civil rights groups, recreation groups, welfare agencies, and the like. Linkages are with groups whose primary objectives are to serve others, but groups organized primarily to serve the needs of their own members are less likely to seek or need relationships outside of the membership. Three levels of linkage relationships can exist. They are:

- Communication -- Contact which involves knowing that the other organization exists, what its purposes are, and who the people are in the organization.

- Coordination -- Developing dialogue aimed at information giving and reaching general agreement on mutual roles. This level involves face-to-face relations between members of different organizations, exchanges through meetings, correspondence, and possibly other forms of dialogue.

- Program Cooperation -- This level of linkage involves establishing working relationships between organizations to cope with a mutually agreed upon need. This type of active cooperation is not constant and different configurations of community groups will find their interests coming together as problems differ and necessary resources for solutions vary.

Important factors in linking community services with community groups are the following:

- Community services as a mainline function or purposeful thrust of the college must be accepted by the governing board, central district administration, college administration, and faculty and have support of persons and groups in the community. The image of the college as an educational and cultural center must be fostered.

- Since what the college can do is dependent upon what the community perceives it can and should do, the college through community services must become an active participant in the affairs of the community. Before the college can play an active role in the community, it must gain acceptance as an originator of community services. This acceptance is often a long term process of educating the community as to possible areas of service.

- By assuming the posture of political neutrality, the college can often serve well the function of bringing together diverse groups. Since the college striking this stance of neutrality is outside the realm of politics or special interests, it can be effective in effecting desirable changes through finding new ways for community groups to work together. Thus, solutions to problems may involve cooperative planning and programming between the college and other community groups.

- An important linkage is the surveying of community needs. For this purpose the community must be analyzed into its many component parts and efforts expended to determine for target groups the services most appropriate. Some examples are high school dropouts; young adults married or unmarried; returning servicemen; adults long in the community and newly arrived; unnaturalized residents, residents whose native tongue is other than English, parents of young or adolescent age children, established adults with grown children; the retired oldster; the vocationally dead-ended adult; high school graduates not continuing their education; married women seeking a second career; and unwed mothers. Techniques for identifying community service needs can be directed toward specific groups or problems.

- Use of citizen advisory groups.

- Participation of the college staff in community affairs, for through meeting people from the college involved in community affairs, people from the community often become involved in college affairs.

- Getting organizations to work together through cooperative planning and programming so service is coordinated.

- Good public relations both within the college and in the community is an essential factor in developing an effective community service program. Because many programs may be short-term and non-repetitive, continuously finding and attracting new participants poses a challenge. There is continuous need for "telling the story" of what the college has to offer.

- Performing an active role in community development by providing people with the skills or personal resources they need to get things done in the community is an important factor. The college, through community service, can be involved in the process of social improvement; it provides the tools for social change -- people become more efficient and effective.

Each college needs to develop a concept as to what community services should be as a basis for determining what should be the community services program. A broad concept useful for developing a comprehensive program includes the notions of (1) permeation, (2) penetration, and (3) education.

Overall institutional commitment to community services is a characteristic having a critical bearing on the effective development of a program and on the potential for creating strong linkages between the community service and other dimensions of the college. Extent to which there is a general agreement that community services is a responsibility of the total institution rather than of the community services staff alone is a matter of great importance. A total college philosophy which requires that all areas of the college get into the act is necessary for the concept to permeate its every activity so this responsibility is not viewed as residing only in a particular division. An effective community services program is based on strong comprehensive, community-oriented programs in the liberal arts, technical and vocational areas, student personnel services and general education. Community services becomes a focal point through which faculty and students become more sensitive and responsive to ways in which college resources can be used in the community. It is also the focal point for increased knowledge of the community and its needs which can come to permeate the college thus resulting in curricular changes which make the entire program of the college more relevant to the community it serves.

Community services constitute the "cutting edge" of the college through which total college resources become increasingly more relevant to the problems and needs of the community. It is through the community services program that the college penetrates community life to meet the now needs of the people it serves.

The Metropolitan Junior College District Colleges will need to become increasingly a part of the interdependency system of community institutions. Effective penetration should ultimately result in each of the colleges being perceived as the cultural center of their community. Each college can serve as an educational resource for developing new ideas for community improvement, for serving all segments and ages in the community and for coordinating and facilitating the work of other service-oriented groups and agencies. The presence of the college in each part of the MJCD should make a difference in the quality of life in the area. The notion of penetration implies an active role for the college in seeking out ways it can be of assistance in contrast to just responding to requests and obvious needs.

Student Personnel Services

1. Introduction to Data on Status of Student Personnel Services

Each college is organized to give major attention to the function of student affairs. It is through the offices responsible for student affairs that various types of student personnel services are organized, coordinated, and implemented at each college. Community colleges are concerned with types of human growth and development other than intellectual, however primary may be this focus. Concern is also evinced about the social and personal types of growth and development. A major component of the social adjustment and adaptation factor is the development of a civic responsibility and citizenship skills. Such factors as mental and emotional health, avocational and recreational needs, and educational and occupational choices aligned with interests and capacities are among major components of personal growth and development. While the process of intellectual growth and development is affected by and in turn affects social and personal growth and development some organized activities other than formal classroom or laboratory learning activities have more contribution to make toward social and personal growth. These activities and other supportive activities designed to enable the student to encounter the formal learning experiences under the most favorable conditions for optimumizing results are commonly classed as student personnel services (or just student services).

Listed below with no importance attached to the order of their position in the listing are major elements of a comprehensive student personnel services program.

Orientation
Admission & Registration
Records
Financial Services
Food Services
Health Services
Foreign Student Services
Testing
Academic Advisement
Counseling: Career-Educational-Personal and Social
Personal Aid Services
Student Activities
Housing Services
Placement (Job or Educational)
Follow-up and Evaluation

The presence or absence of emphasis upon each of these major elements and the nature of them varies in accordance with local conditions. A brief discussion follows on each major element as background for the presentation of data on the status of student personnel services provided.

a. Orientation

Orientation as a major element has several facets to it and is most significant. One aspect which is too often neglected but which in the Metropolitan Junior College District is most significant is the provision of pre-college information. Many procedures and techniques can be devised to accomplish this function adequately. Some involve arranging for individuals and groups of students (including family members) to visit college premises. Most will involve arranging for informational contacts in the junior and senior high schools, in churches, in neighborhood centers, in housing complex facilities and other suitable places for communicating with prospective students. Such communication can be designed to (1) encourage post-high school education (2) describe local college programs and opportunities, (3) interpret requirements for entering the public institutions or their various programs, and (4) to identify sources of assistance for reaching a decision about college attendance. A second aspect is the student inductive function. This involves those activities of the college designed to acquaint entering students just prior to class attendance with the plant and staff resources, student activities, and college procedures and regulations. Orientation activities are designed to provide organized group experiences for students conducted by college staff members and/or advanced students. They are focused upon needs of the student with emphasis upon (1) adjustment to the college program, (2) formulation of realistic and satisfying plans for the future, and (3) effective use of college and community resources.

b. Admissions and Registration

The admissions function involves the establishment of procedures by which prospective students may apply for admission, for appraising the eligibility of the student for admission, for consulting with the applicant, and for admitting the student. Included in the appraisal process are those activities designed to obtain, organize and appraise significant background for each prospective student to determine (1) his eligibility for admission either to the college or to various courses and curricula within the college (2) his probable chances for success in various courses and curricula, and (3) any conditions or restrictions to be imposed on his admission or readmission. The admissions counseling function includes scheduling and conducting conferences with applicants (individually or in small groups) who may seek or need staff assistance pertaining to their (1) admission to college, (2) anticipated problems in attending college, (3) selection of vocational and educational objectives, or (4) selection of courses to fulfill curricular requirements.

Registration includes activities designed to (1) officially register students (2) collect demographic data, (3) expedite academic regulations, and (4) initiate and maintain official records of progress and status. Procedures are sometimes developed for helping students at home, at school, or at other suitable places to complete admissions applications. Systems of continuous pre-registration provide opportunity for the college to establish appropriate types of pre-college attendance - post-high school graduation activities designed to upgrade skills or to eliminate academic deficiencies for those who need to do so. A drive in and register system developed by one large community college has facilitated the enrollment of working adults who desire to register for enrollment.

c. Records

An important tool for effective education, personal-social, and career counseling and for academic advisement is a record of information about each individual. Records of academic progress and achievement become increasingly important as an educational system permits more flexibility of student movement within and among institutions. A longitudinal record of information on traits and characteristics related to school and job success, or lack of it, is indispensable to the professionally trained counselor. The personnel records aspect of a student services program is designed to establish and maintain a cumulative record of student development as reflected in skills he develops, activities in which he participates, employment in which he is involved, awards he receives, and judgment ratings of staff members. Not only does this function involve the development of a system for accumulating, analyzing, and using information for the benefit of the student, but it also involves the formulation and establishment of a policy for confidential handling of the records, including specific policy on the release of information to agencies external to the college (e.g., governmental and law enforcement agency personnel).

d. Financial Services

Financial services consist of those activities designed to provide or identify various sources of financial assistance (loans, grants, part-time employment) for students whose admission, progress, or continuation in college may be impaired by the lack of money. These services are an important adjunct to the District College education programs. They include in addition to assisting students on the basis of need the obtaining of money and selection of student recipients for scholarships on the basis of outstanding achievement. They can serve to emphasize, recognize, and reward superior performance.

e. Food Services

To accommodate students, youth or adults, who work and attend classes on a part-time basis and often have little time in between activities, the availability of food and beverage services in the college facilities is an important support service. Vending machines and snack bars located at appropriate points in proximity to classroom spaces will also enable the full-time student to pursue his educational activities with a minimum of disruption if he can obtain food and beverages on the premises.

f. Health Services

Health services include procedures for a systematic and periodic health and physical appraisal and provisions for first aid services and referral. These services also include activities designed to (1) acquaint students and staff with appropriate health and safety practices, (2) provide adequate procedures for handling emergencies, and (3) provide or identify suitable medical resources which can be used to treat physical and emotional problems. Other services may include the maintenance of certain clinical services through an infirmary for treatment of certain types of physical ailments and/or emotional difficulties.

g. Foreign Student Services

Even if a small number of foreign students will desire to enroll in the colleges, provision should exist for giving special attention to them. Students from other countries have types of problems which are different from those experienced by native students, and they need special attention. When the number warrants, the provision of a single foreign student services center or room is advisable.

h. Testing

Regardless of the classification of problem type or the method of counseling, effective counseling necessitates as complete, accurate, and valid information as is possible for the counselor to have about both the individuals or groups of them and the type of problem to be considered. Testing is a major element of student services and an essential tool for effective counseling. Tests of human traits are of many forms. Tests designed to produce measurements of traits found to be related to success or lack of it in school or on the job can produce results, which if appropriately used, contribute to more effective counselling.

Tests designed to be used as tools in evaluation of progress toward identified objectives can improve and make more effective the education process for both the college and the learner. Measurement and evaluation are integral essentials to effective teaching and learning at all levels.

The testing function involves all those activities of the college designed to assess by standardized procedures those abilities, aptitudes, achievements and other personality variables which are considered significant in educational and vocational appraisal and those which are helpful in appraising student educational progress at the college. Basic skill diagnosis involves determining through tests and other means, deficiencies of students in those basic skill areas that are prerequisite to their academic progress in college or in occupations which they may have selected. While tests are not the only source of information a counselor may obtain about an individual, or a group of individuals, they are nevertheless important and indispensable tools.

i. Academic Advisement

Academic advisement is most effectively a decentralized activity spread throughout the various instructional departments and divisions among the faculty. The primary focus is upon helping a student determine what courses to take next and helping him adjust course loads by dropping and adding courses. Most faculty members have a given number of students assigned to them as advisees, but a student should always have the opportunity without difficulty to change advisers if he so desires.

Such activities are designed to bring each student into individual and continuing contact with a college staff member qualified to advise the student regarding such matters as (1) selection of courses for which the student is eligible and what are consistent with his curricular choice as well as any occupational preferences he may have, (2) evaluation of academic progress, (3) effective methods of study, and (4) identification of specific resources within the college or community that might meet the special needs of the student.

j. Counseling

Counseling is a formalized aspect of guidance in the sense that all education designed to foster adjustment and adaptation of the individual is a form of guidance. Counseling functions are sometimes classified according to the nature of the problem dealt with. Such a classification is arbitrary, for problems of human beings are seldom so discrete. With this understanding in mind it is useful to consider three types of counseling - career, social-personal, and educational.

Counseling can also be classified by method or nature of the relationship between the counselor and the counselee. Direct counseling in its pure form is where the counselor, after having considered evidence regarding a problem possessed by a counselee, tells the latter what he should do, what choice he should make among alternatives, or what line of action to take. In its pure form indirect counseling is where, in a most permissive relationship, the counselor assists the client through questions and the provision of information to gain greater maturity of insight and understanding of conditions regarding the problem and alternative decisions to the end that the client will make his own decision. It is a process of helping the student see through himself so he can see himself through. The eclectic method is a combination of the two methods applied discriminately depending upon the nature of the problem and the personal characteristics of the client.

Academic advisement, advice to a student about what units or courses to enroll in to pursue a program of study, is a form of educational counseling. However academic advisement is usually provided by a staff member of the post-secondary education institution and is different than educational counseling which focuses upon whether a person should pursue post-secondary education, what type of program and level of attainment are most in accord with abilities and future goals, etc.

While a staff of trained specialists is needed for direct contact with individuals or groups of them about problems, some of their most productive efforts can be to increase the ability of the total teaching staff to do more effectively that level of counseling, such as educational advisement, of which they are capable. Another productive line of effort is to work closely with counselors at the high schools to assist them in their more effective work with students. The consulting services of professionally trained counselors are designed to aid students who seek or need special assistance in (1) formulating vocational and educational goals, (2) clarifying their basic values, attitudes, interests, and abilities, (3) identifying and resolving problems which may be interfering with their educational progress, and (4) identifying appropriate sources of assistance for resolving more intensive personal problems.

For youth and adults to make wise decisions about job selection and preparation, they must first be aware of the existence of various kinds of work. Demands, requirements, compensations, conditions of work, and nature of work activity need to be known. This information is shifting due to social, economic, and technological changes. Important also is information on trends in opportunities among various occupational fields. While occupational information of different types should be available to students at different levels of the educational system prior to secondary school completion, there is need for information of this type for students at the post-secondary school levels who may be considering alternatives. For adults unemployed, desiring to retrain for a different line of work, or wanting to upgrade job skills for advancement purposes, such information is also important. From the standpoint of the economy and its requirements, it is essential that up-to-date information on needs be made available to youth, adults, and persons providing vocational counseling services.

Since occupational information is constantly changing, a problem exists in keeping the occupational information materials current. Therefore part of this function includes the identification of sources of first-hand information in the District to which students may have access upon referral.

k. Personal Aid Services

Several discrete types of services can be classified under the heading of personal aid services. They are those activities designed to facilitate college attendance and success. Remediation, basic skill development and elimination of educational deficiencies constitute a major and important type of personal aid service. The provision of care for small children while parents attend classes is another service of increasing importance.

Reading clinics and laboratories are needed to help youth and adults to improve reading skills commensurate with the demands of college level work. Basic skill development in spelling, English, mathematics and how to study are needed. English as a foreign language is needed for persons whose mother tongue is something else. Some youth and many adults may have educational deficiencies due to their never having taken certain basic subjects that are prerequisite to success in a college program of their choice. Opportunity should exist for gaining the necessary proficiencies. Older youth and adults who will not attend such activities if offered through a high school or as part of an adult education program will do so if the opportunities are made available through a college.

In a metropolitan area where a large number of adults are prospective students, family responsibilities are often given as a reason for non-attendance. A major impediment to the attendance by women is the presence of one or more small children. As the numbers of young married couples attending school has increased, the problem of caring for a young child has stood in the way of college attendance. A needed supportive student service in view of these conditions is the provision by the college of child care center services where small children can be cared for and supervised during periods of time when parents, especially the mothers, are in school. These centers can serve a dual function by providing a service to student mothers and by serving as laboratories for studies of child growth and development and servicing educational programs designed to train child care center managers and assistants. Following the practice established during World War II where defense materials manufacturing plants established child care centers for children of working parents, this idea of service has slowly become accepted in many parts of the country and has been advocated for some time by some authorities in the field of college student personnel services as a legitimate support activity. How many child care centers are needed is a matter of conjecture at this point. Extent to which use would be made of them depends upon many things including the degree of acceptance which develops partially based upon how they are developed and managed.

Another type of specialized personal aid service for which provision should exist is advisement of Veterans on legal, financial, and other matters related to their welfare and progress.

l. Student Activities

Student activities constitute an important part of all educational experiences provided by a college to supplement classroom experiences and to foster other types of personal and social growth. They are an important aspect of helping the students identify more closely with the respective colleges. These activities can be many and varied and should be developed and maintained in accordance with student interests. Major types include those designed to provide opportunities and encouragement for students to participate in self-governing activities that provide experiences in decision making and democratic processes. Others are concerned with development of cultural, educational and vocational opportunities such as musical, dramatic, forensic activities, student publications, and vocational or academic interest groups. Some activities may be designed to encourage student involvement in service activities of the community. Others may assist students to develop those social, recreational, and leisure time activities which are appropriate to a college setting such as intermural activities, student center programming, and other recreational interest groups.

m. Placement

Placement services are designed to locate appropriate employment opportunities for graduates who may be suitably qualified and to provide prospective employers with placement information that will help them in reaching employment decisions. These services include the development and maintenance of placement files, consulting with prospective employers and scheduling placement interviews. Part of the placement function should involve cooperative activity with instructional departments in identifying part-time work experiences or full-time internship opportunities specifically related to the educational goals of students. These activities would involve placement of students who are currently enrolled in occupational curricula, such as business management and technical curricula, in positions of employment that are mutually productive for the student, the employer, and the college. The development of instructional programs which contain as integral parts a combination of related work experience and study is most important. There are multiple advantages for having these arrangements coordinated through the college placement offices.

n. Housing

For a commuting system of community college education that does not attract many students from outside the District and at a time when being in loco parentis is decreasingly looked upon as a college responsibility, there may exist little or no need for housing services. College operated dormitories seem inappropriate during the foreseeable future. Part of the foreign student services may involve helping foreign students obtain suitable housing accommodations, but beyond that there seems little need for an organized student housing services unit in the student personnel services program.

o. Follow Up and Evaluation

Although over-all institutional research and development activities should include follow up and evaluative studies, certain types of activities should be conducted by the student personnel services staff in coordination with the total institutional development and research activities. They can very well include those activities designed to collect, analyze and interpret data concerning (1) the characteristics of and transitions within the student population (2) the needs of students, (3) the use of college resources by students, (4) those factors affecting the progress of students during and following their college experience, and (5) the adequacy of various college services designed for student development.

2. Status of Orientation Activities

Officials at each college were asked to identify activities used to provide pre-college information to prospective students. Shown in Table 28 are the activities reported used by each of the colleges for this purpose.

Methods for inducting new students into the college were described. At Longview, the student typically spends a day at the college with 20-30 other incoming students. Student peer counselors provide basic information. Placement tests are administered and each student confers with a counselor to plan an academic program. Follow-up counseling sessions are encouraged, particularly with students a counselor anticipates may experience difficulties, for example, one with vocational indecision.

TABLE 28

ACTIVITIES REPORTED USED TO PROVIDE PRE-COLLEGE INFORMATION

Activities for Providing Pre-College Information	Longview	Maple Woods	Penn Valley
Visitations to high schools	X	X	X
Use of prepared slides to present college information	X		
Academic advisement in high schools	X		
Participation in college nights and/or days	X	X	X
Visits to military, business, industry & civic organizations	X		
Invite high school counselors and/or administrators to campus for planned activities		X	
Newspaper & radio advertising		X	
Written brochures & announcements distributed to high schools & community		X	X
Participation in career fairs for local high school students			X
Inquiring persons invited to visit campus			X
Outreach for Veterans			X
Outreach program via mobile counseling van			X
High school students visit college		X	

At Maple Woods incoming students are assigned initially to small groups for basic orientation following which they hold individual conferences with a counselor about their academic plans.

Pre-counseling sessions with groups of new students are held at Penn Valley during the summer. All first time freshmen are given a mimeographed brochure (Educational Planning Guide) prepared by counselors, to get students into self planning and to provide basic information about the college and its curricula. Prior to the beginning of each semester, three days are set aside during which new students are exposed to each segment of the college. In a large group setting, divisional heads and the president welcome the students and explain their role in the college. In smaller groups, students interact with representatives of such areas as health, library, student activities, and admissions. The counselors conduct an orientation which includes pre-planning on both a short and long range basis.

3. Status of Admission and Registration Activities

At Longview, admissions applications and information regarding procedures for applying are widely distributed to community feeder sources. Provided the applicant has submitted the completed application and required credentials, he is unconditionally admitted. An attempt is made to confer with each applicant prior to registration for assessing his abilities and interests and for advising him regarding educational plans.

Applicants for admission at Maple Woods are given a "Planning Guide" and other pertinent materials and encouraged to arrange an appointment with a counselor if they have questions. New students are asked to take the ACT test battery, which assists in proper placement in appropriate courses. Small group pre-enrollment sessions are conducted by appointment following which each student works out a program in individual conference with a counselor. When fees are paid the student's registration is complete. Degree planning forms are initiated with each student and updated each semester or each contact subsequent with the student. During pre-enrollment small group sessions, questionnaires are administered, regulations explained, and Student Handbooks are distributed. Adults age 20 and over may be admitted as special students. Students denied admission may petition through a counselor and be admitted for a limited credit load.

At Penn Valley, a process of continuous admission is used. As soon as a completed application and credentials are received, the applicant is admitted. Applicants with marked deficiencies are requested to see an admissions counselor and all admitted students are requested to make an appointment or plan with a counselor before enrollment. Students are urged to take the ACT test battery and first time freshmen were administered also the Triggs Diagnostic Reading test. These test scores, and high school rank and grades are used for placement in classes. Students with marked deficiencies may be admitted for a limited schedule until they demonstrate by grade average their readiness for full-time status, but no one is denied admission to the college in keeping with the open door philosophy of service. Persons age 21 and over without either a high school diploma or General Educational Development Certificate are admitted as special students.

Registration into classes is by computer. Each student pre-plans with a counselor; then he takes his plan sheet to registration station to obtain permit to enroll on which area of study is coded; next he goes to a posted schedule of classes to obtain class schedule hours, and finally he goes to the computer for registration and fee payment. Computer registration provides complete up-to-the-minute information concerning: class size, total enrolled, area of study, etc. Up-to-date schedule of open classes is posted following close of a registration period - each four hours. The registration process includes a questionnaire to gain additional demographic information.

4. Status of Records

At Longview a cumulative record is maintained for all students who have been or are currently enrolled. Approximately 11,000 active and inactive records are housed in the admissions office. In order to protect the records from theft or calamity, each one is being microfilmed. The specific record maintenance functions which are the responsibility of the records office are transcript analysis, graduation evaluation, cumulative academic paper and computer records, transfer of student records to other institutions, certification of attendance and eligibility for various financial aids or "good student" benefits, etc.

The effort to develop efficiency and systematization in the records office has resulted in a significant improvement of the total operation. Further progress will be realized with the addition of needed support staff and with the development of the Student Information System (SIS).

At Maple Woods, a permanent grade record card is filed in fireproof files for each student. These are updated with semester grade tapes, and are micro-filmed periodically and placed in a safety deposit box off campus for greater security. Inactive student records are also filmed and maintained on campus for reference as needed. File folders are kept on each active student, and on inactive students for a period of three years. Student semester program cards and withdrawal forms are also filmed by semester.

At Penn Valley the admissions office prepares a folder for every student. This contains the application for admission, test scores if available and transcripts of high school and previous college courses attempted.

Permanent records are maintained on all students and constantly up-dated. Supportive records of residency, adds, drops, and withdrawal are maintained. All records are microfilmed.

5. Status of Financial Services

At Longview the administration of financial aids is reported to have improved substantially during the past two years. Applications have been consolidated, documentation of records improved, the analysis of need is more equitable and systematic, and the amount of aid available (institutional and federal funds) has increased.

The Dean of Student Affairs is directly responsible for the administration of the entire financial aids program, and he is assisted by a paraprofessional who also serves as the secretary to the Dean. This is a far less than desirable situation. Since the Dean has responsibility for the entire student personnel operation, he is not able to devote more than ten percent of his time to financial aids. The direct work performed by the Dean in reviewing all applications and making awards also reduces time which should be spent in general administrative planning.

A financial aides brochure is distributed by Maple Woods to local high schools along with application forms and student need analysis forms. The college participates in the EOG, CWSP, NDSL, and LEEP Programs. In addition to hiring students on campus, a listing of part-time and full-time job openings is posted regularly on bulletin boards. Job openings and financial aid services are frequently published in the student newspaper and administrative bulletin. The Job Data Bank daily microfiche services of the Missouri Department of Employment are utilized by the college which has a viewer located in the Counseling Center. The college certifies to the respective agency college attendance of persons eligible to receive financial benefits from Social Security, railroad retirement, vocational rehabilitation or the Veterans Administration.

The financial aid office at Penn Valley is staffed by a paraprofessional, a student helper on CWSP, and a half-time clerk shared with the English and Biology departments. These work under direction of the Dean, Admissions and Counseling. This office handles all college scholarships and all other aid provided by Federal programs. Aid is awarded to qualifying applicants on the basis of application and the ACT Family Financial Statement. The college participates in all Federal student financial aid programs: NDSL, EOG, CWSP; Nursing loans and scholarships; LEEP grants and loans. For the Fall semester 1972, approximately 160 students received scholarships; fifty-four, however, were awarded by outside agencies but are processed through the college office. More than 300 awards of Federal aid totaling $118,000 were processed for the Fall semester 1972. A Scholarship Committee awards scholarships which are based on academic achievement and need. The financial aid office handles other awards on the basis of need as established by guidelines.

Some financial aids are provided by the MJCD. Academic and athletic scholarships, grants-in-aid, small loans, and a 50 percent deferred payment for veterans are available.

6. Status of Food Services

Food services are the responsibility of the MJCD Business Affairs office and canteen vending service is provided at each college. In the Maple Woods College area clubs frequently offer hot dish specialties to students for a reasonable price.

7. Status of Health Services

Objectives of health services at Longview are the following: To provide health care and clinical services encompassing emergency treatment, interim care, and referral to appropriate health agencies; preventive medical service including immunization programs, appraisal of all students, diagnostic programs and referral to community agencies; health counseling as an adjunct of regular counseling services offered at the college; a continuous series of health education programs related to such issues as drug abuse, planned parenthood, communicable diseases, abortion, and other health related problems; and to assure environmental health and safety by working in cooperation with state and local health agencies.

The college has not been able to function comprehensively in all of the health service objective areas. Although a registered nurse is employed on a full-time basis, her professional authority is limited due to the fact that a physician is not officially recognized as a college employee, either on a consulting or part-time basis. The primary health service to date has been limited to emergency care treatment.

Health examinations at Maple Woods are required only of basketball players. Health education is limited to physical education classes. The college views its primary health service role as assisting in emergencies. At enrollment time all students complete a health history and emergency notification form. In a case of accident the college administers first aid, notifies relatives, and arranges for the student to get help from the nearest hospital.

At Penn Valley students complete a health questionnaire as part of the enrollment process. At present, physical examinations are given only to those students who are enrolled in programs where such exams are required and to athletes. First aid is available to day students through the nurse. Evening and Saturday students may receive first aid in the Deans office or in the admissions office. Efforts are currently underway to procure a nurse for evenings and Saturdays on a part-time basis. The college has a relationship with Saint Mary's Hospital and a local ambulance company, both of which provide free care and services to those students who are unable to pay. There is an abundance of health education and related information disseminated to students through the nurse's office.

8. Status of Foreign Student Services

At Longview a member of the counseling staff serves as the college's foreign student advisor. This person has worked closely with the Counselor-Registrar to develop admissions procedures that account for unique requirements, i.e. demonstration of English proficiency, which foreign students must meet. Additionally, the counselor works with each foreign student in educational program planning. At Maple Woods the Counselor/Registrar determines eligibility of foreign student applicants and services them with assistance of his secretary. A counselor at Penn Valley is assigned as advisor to foreign students and as the person to whom they go for assistance. The college offers two English courses designed for them. No foreign student services center or office, as such, exists in the MJCD.

9. Status of Testing Services

Longview Community College Testing Service assists all students in their educational and career decisions through the administration, scoring and interpretation of a variety of standardized tests and inventories. Various interest inventories such as the Strong Vocational Interest Inventory and the Kuder Vocational Tests can provide the student an insight into the variety of occupations available in his areas of interest. Other tests offered at Longview include advanced standing, achievement, ability, and aptitude tests.

Longview Community College is an open testing center for CLEP (College Level Examination Program) tests. This is a national program which allows students to earn college credits through examination. There are two types of CLEP tests: the General Examinations and the Subject Examinations. A testing specialist is on the staff.

The testing program is strong at Longview and it has proved to be an invaluable support service for the counseling staff and the instructional faculty. The growth in this program is largely attributed to the employment of a testing specialist.

The Maple Woods College serves as a test center for ACT, GED, and CERT (Radiologic Technologists). Vocational interest, aptitude, and psychological tests are administered by counselors to students as applicable. Armed Service and CLEP credits are accepted, and an internal departmental credit-by-exam policy is in operation for students desiring to challenge a course and "test out" on the basis of proficiency.

The Penn Valley College has a wide assortment of tests available for students. The Triggs Diagnostic Reading Test was administered to approximately 600 first time students, Fall 1972. In addition the counseling staff utilizes as needed: (1) Kuder and Strong Interest Inventories, (2) B&H Study Skills, (3) WAIS, (4) California Test of Mental Maturity, (5) SCAT, Form 1C, and (6) other tests of ability, personality, aptitude, achievements, etc. The college accepts CLEP General Examinations as well as CLEP Subject Matter tests, department constructed tests for credit, and offers challenge examinations.

10. Status of Academic Advisement Services

An academic advisement program at Longview has been structured so that each student who is pursuing a program of study is routinely advised a minimum of three times previous to graduation. The three planned advisement sessions are conducted prior to the students first enrollment, upon completion of twenty-four credit hours, and at the time of application for graduation. Students who are undecided regarding their educational plans or who anticipate a change of program are encouraged to see a counselor whenever the need arises.

The total responsibility for the implementation of the academic advisement system rests with the counseling department. This means that in order to advise close to 3,000 students, the counselors have devoted approximately eighty percent of their time to this activity. For instance, since March 1, 1972, with the exception of three weeks in September, the counseling staff has devoted full-time to academic advisement. Academic advisement at Maple Woods College for other than new students consists of updating degree planning sheets each semester with help from counselors, At Penn Valley nearly all advising is done by counseling staff; coordinators, directors, and teaching staff of occupational programs advise students and also pre-plan with them.

11. Status of Counseling Services

At Longview four counselors have been performing the various counseling services provided by the college. Counseling is differentiated from academic advisement in that the former entails working with individuals or groups to promote change in behavior, values, attitudes, and beliefs while the latter entails the dissemination of information and advice. The counseling staff has been functioning to a limited extent in educational-occupational, social, and emotional counseling, in discussion group classes and spontaneous groups, and in working with faculty in teaching a career previews course. In addition to academic advisement and counseling duties, the counselors have been assigned responsibilities such as foreign student advisement, graduation evaluation, transcript analysis, high school articulation, development of college articulation materials, assistance at registration, and placement. The numerous activities for which the department is responsible prohibits comprehensive functioning in direct counseling work.

In addition to activities described for student orientation admissions and registration, counselors at Maple Woods hold special sensitivity group classes, talk with students and parents about plans and problems, make referrals to other agencies, visit with transfer college and business representatives, and work on special projects designed to aid students. Examples of the latter include tapes describing all college courses through the eyes of the instructor, study skills workbooks, and college transfer course equivalency lists.

A staff of five professionally trained and certified counselors provide counseling and guidance services to assist students in selecting wisely in matters relating to their personal, social, emotional, and career related development at Penn Valley College. Efforts are currently under way to free the counselors of certain clerical tasks which should result in their being able to more effectively pursue the above.

12. Status of Personal Aid Services

Basic skill development and the elimination of educational deficiencies are areas to which the Longview College student affairs staff is philosophically committed and in which they desire to be involved. A college developmental committee has been established and is in the process of studying means for implementing a program of developmental education. The need to provide child care facilities as a service for potential women students has been recognized, but such facilities have not been provided.

At Maple Woods remedial classes in English and mathematics are offered. Counselors confer with students individually about academic problems and produce for their use study skill aids. Child care facilities were reported scheduled for two evenings a week beginning during the Spring 1973.

The instructional program of the Penn Valley College offers basic remediation courses in reading, English composition, and mathematics. A variety of means is used to correct deficiencies including a systems approach in English; tutorial services are available for all students at no cost. Through its Early Childhood Education curriculum, the college has child care provision for children of students. While there is a charge, it does not appear exorbitant and those who cannot pay receive the service.

13. Status of Student Activities

At Longview the Student Government visualizes its major role to consider student welfare issues. Predominant concerns are student evaluation of instruction, promotion of a peer counseling program, procurement of a multi-purpose facility, devising means of bridging schism among different student subcultures, and providing student input to graduation ceremonies. Responsibility related to major student affairs budgetary matters has been delegated from Student Government to the Longview Activities Board (LAB) and the Club Executive Council. The LAB is responsible for the planning and implementation of college-wide activities such as concerts, dances, lectures, and symposia. The Club Executive Council administers and coordinates all club and special interest group activities on campus.

Student Government at Maple Woods has an executive council and a Senate, elected by the students annually. They administer a student activity fee budget, provide financial encouragement to clubs and organizations for worthy community causes, and for faster cultural and recreational programs for all students. A biweekly student newspaper is funded as is an annual literary magazine. Approximately eighteen clubs are active on campus. Student activities include dances, coffee houses, Political Days, Cultural Festival weeks, and drama.

At Penn Valley, the Student Senate, consisting of 30 elected students, has evolved to a level of sophistication which now finds it efficiently conducting the affairs of the student body. Most activities are in the area of fiscal responsibility and accountability, and expansion of organizational and entertainment activities. Student publications include a college newspaper and a weekly newsletter. At present, students do not plan to publish a yearbook. There are currently 15 special interest groups in existence. The athletic program currently provides intercollegiate competition in basketball, tennis, and judo.

14. Status of Housing Services

Longview does not provide housing services for students. Lists of rooms and apartments available in the Maple Woods area are occasionally listed for the benefit of students requiring housing. For those students seeking living accommodations, the Penn Valley College posts available apartments or rooms which landlords provide. No effort is made to provide approved housing lists. No dormitories or other housing facilities are provided by the MJCD Colleges.

15. Status of Placement Services

Longview College has no formal placement services. Placement assistance which has been available to students has been provided by the counseling department chairman and the Assistant Dean of Occupational Education, neither of which have the time required to develop these services fully. Likewise, limited placement services are now being provided at Maple Woods College through the Financial Aid office.

Penn Valley College has an organized full-time Placement Office headed by a professional counselor to help students locate part-time and full-time jobs. On campus interviewers are invited to the college. It also participates in the Job Data Bank provided by Missouri State Employment Security Office. Every student employed by the college or on College Work Study is placed and followed up by this office.

16. Status of Follow-Up and Evaluation

As an inservice planning and evaluation effort at Longview, the Student Affairs staff prepares planning objectives for a two month period, at the end of which each objective is evaluated in terms of how effectively it was accomplished.

In the 1970-71 academic year a guidance questionnaire was administered to 200 students at Maple Woods to determine how they viewed the services of the counselors. A similar instrument, but covering the entire Student Affairs department functions, is scheduled to be administered in May, 1973. A withdrawal form is regularly obtained from students dropping out, transferring, or graduating which specifies their reason for leaving.

Since this study began numerous statistical and evaluative studies have been undertaken and completed by the District Office of Research. Cooperative efforts involving student affairs personnel on each campus are reported underway for additional significant follow-up and evaluation studies.

Physical Facilities

Longview Community College campus occupies a 146 acre tract in the western edge of Lee's Summit approximately 18 miles southeast of downtown Kansas City, Missouri. Except for a small wooded draw, the campus is comprised of open, rolling ground with a low elevation of 930 feet and a high elevation of 1,000 feet above sea level. Because of its elevation, the site commands a striking view of the valley of the Little Blue River to the west. The view will become even more impressive when this valley is filled with a lake which will be part of the Federal flood control system. Longview College is housed in ten interim temporary buildings containing 69,408 square feet. A new permanent campus center now under construction will be added.

The Maple Woods Community College campus consists of 203 acres of rolling, partially wooded land located fifteen miles north of downtown Kansas City, Missouri. The physical nature of the land includes a gradual slope to the south to Big Shoal Creek and then a steep incline upward in the southwest corner of the property. Maple Woods is located in a rural setting with the closest residence about one-half mile from the campus and the closest commercial establishment about two miles away. The major east-west access road is Missouri Highway 152 (Barry Road). Major north-south routes include Missouri Highway 1 (Antioch Road), North Oak Trafficway, and 169 Highway (a divided, limited access federal road). Maple Woods College is housed in eight interim temporary buildings containing 51,840 square feet. Completion of permanent facilities now under construction to house learning resources and learning services will add 28,000 square feet bringing the total to 79,840 square feet. There will be parking for 1,200 automobiles

The Penn Valley campus is located at 3201 Southwest Trafficway on 25 acres of elevated flat land. The site overlooks Penn Valley Park below. The location provides a view of the skyline of downtown Kansas City, Missouri. Penn Valley College has been recently housed in new permanent facilities containing 413,359 square feet. A two story parking structure of 272,000 sq. ft. provides parking for 953 automobiles, or about a third of the full and part-time day enrollments reported in the fall 1972.

In the spring 1973 district offices and Penn Valley classes in art, secretarial training,and data processing, the Veterans Education Center, and the Career Center were housed at 560 Westport Road in a district owned two story building containing 36,783 square feet. Three interim buildings containing 17,280 square feet and located in back of the Westport building were constructed by the college on land leased from the city. The lease expires June, 1974. Interim buildings house offices, the Early Childhood Education program,and storage.

Shown in Figure 6 are the locations of the three campuses within the 400 square mile area and the District offices.

BEST COPY AVAILABLE

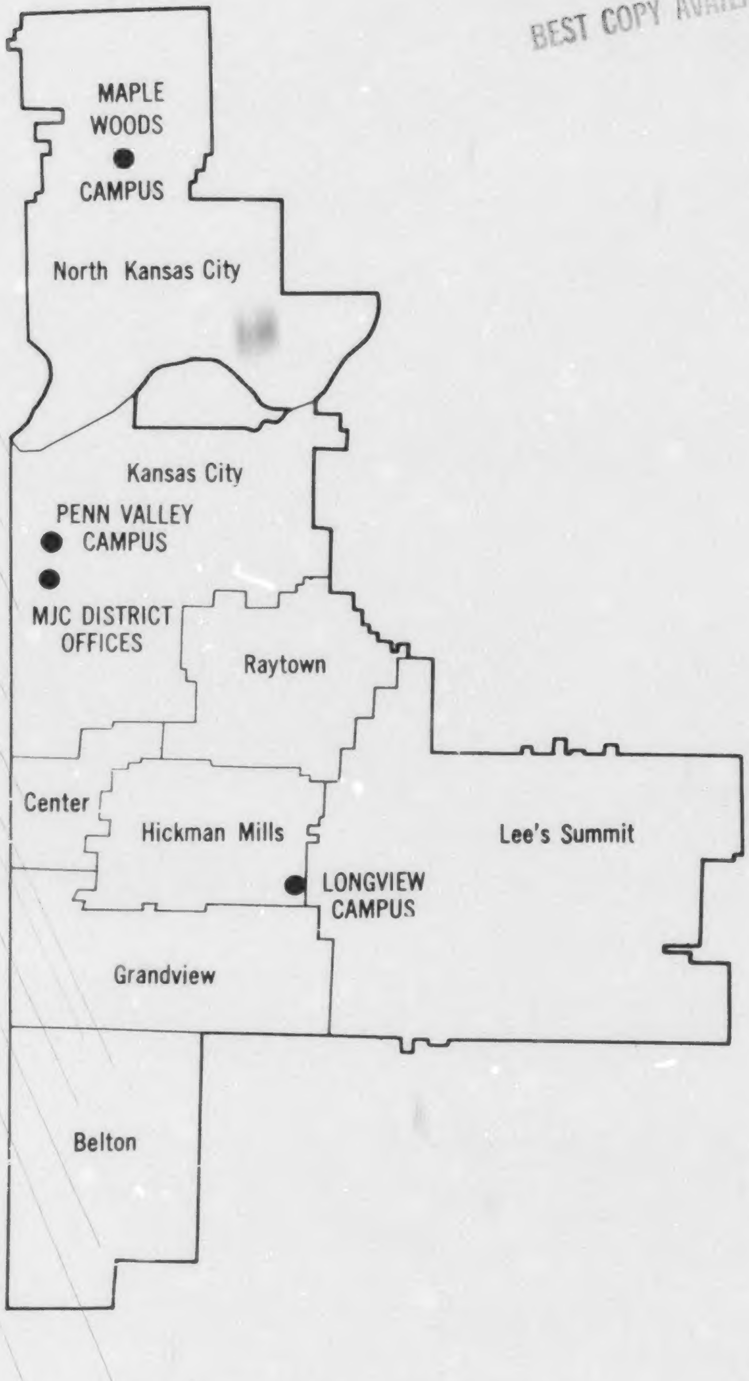

MAPLE WOODS CAMPUS
North Kansas City
Kansas City
PENN VALLEY CAMPUS
MJC DISTRICT OFFICES
Raytown
Center
Hickman Mills
Lee's Summit
LONGVIEW CAMPUS
Grandview
Belton

FIGURE 6 LOCATION OF COLLEGES

BEST COPY AVAILABLE

1. Operation

A major source of revenue for operating purposes is a maximum levy of fifteen cents per $100 assessed valuation authorized by qualified voters of the District. Shown in Table 29 are the pattern of equalized assessed valuation growth for previous years and projections to 1980 based on two different assumptions.

TABLE 29

PROJECTIONS OF EQUALIZED ASSESSED VALUATION

	Year	MJCD Assessed Valuation		Percent Change	Pleasant Valley AV
	1961	1,107,160,342			
	1962	1,137,045,585	↑	2.699	
A	1963	1,180,131,629	Average	3.789	
C	1964	1,210,627,914	4.944	2.584	
T	1965	1,327,949,840		9.691	
U	1966	1,407,059,610	↓	5.957	
A	1967	1,473,266,713		4.705	
L	1968	1,481,023,211	↑	5.265	36,973,295
	1969	1,537,878,488	Average	3.839	43,362,108
	1970	1,584,558,331	4.196	3.035	40,022,500
	1971	1,651,785,730		4.243	39,632,060
	1972	1,719,304,433	↓	4.087	37,934,710
		(Average if Pleasant Valley had been included 3.728)			
		A.			B.
P	1973	1,783,400,102			1,770,883,566
R	1974	1,849,885,258			1,836,902,105
O	1975	1,918,848,980	↑	↑	1,905,381,816
J	1976	1,990,383,670			1,976,414,449
E	1977	2,064,585,173	Average	Average	2,050,095,180
C	1978	2,141,552,908	3.728	3.000	2,126,522,728
T	1979	2,221,390,000	↓	↓	2,205,799,495
E	1980	2,304,203,419			2,288,031,700
D					

Since the Pleasant Valley area [illegible] being added to the MJCD, the annual percent change since 1968 was calculated from what the total equalized assessed valuation would have been had that area been a part of the district. Then projection "A" was made on the assumption that future change would approximate an average increment of 3.728 percent. Projection "B" assumes an average annual increment of 3 percent. In 1980 it is likely that the equalized assessed valuation will approximate a figure between $2,304,203,419 and $2,288,031,700. In view of the trend between 1961 and 1972 in pattern of equalized assessed valuation growth in the present district, we believe that projection "A" will be closer and probably under the actual valuation which will materialize.

Shown in Table 30 are the percents by source and function of actual and budgeted revenues and expenditures for the MJC District for the last four fiscal years. It can be seen that state and local taxes provide about a third of the general operating revenues, state aid has supplied over another third of the revenue, and student fees have provided slightly under a fourth of the revenue. Declining percents of revenue have come from investment income and federal and state appropriations for instructional expenditures. As fund equity is depleted, the amount and percent of revenue from investment income can be expected to decline. In view of present trends relative to revenues from Federal sources, one might safely forecast a decline from this source.

TABLE 30

PERCENT OF REVENUE BY SOURCE AND EXPENDITURE BY FUNCTION

Source of Revenue and Function for Expenditure for Operation	Percent by Fiscal Year							
	Actual		Budgeted		Projected*			
	1969-1970	1970-1971	1971-1972	1972-1973	1973-1974	1974-1975	1975-1976	1976-1977
Revenue Source								
State & County Taxes	31.9	38.2	35.7	32.7	27.4	25.8	24.5	23.3
State Aid	34.8	30.0	36.0	37.1	44.9	46.2	47.3	48.3
Federal & State Appropriations	6.0	6.2	3.9	4.1	3.3	3.0	2.8	2.6
Student Fees	23.3	22.6	23.1	24.0	23.2	23.9	24.4	24.9
Investment Income	3.5	2.3	1.2	1.3	1.1	1.0	.9	.8
Other Revenue	.5	.7	.1	.8	.1	.1	.1	.1
Expenditure Function								
Administration	20.6	19.0	14.3	14.0	13.4	13.4	13.4	13.4
Instruction	57.6	58.4	57.2	57.2	54.7	54.8	55.0	55.2
Instructional Resources	8.7	3.7	5.3	5.0	4.8	4.8	4.8	4.8
Student Affairs	9.7	8.3	8.7	8.4	8.0	8.1	8.1	8.1
Plant Operation & Maintenance	3.4	10.6	10.9	12.6	16.4	16.5	16.5	16.5
General Institutional Expenses	--	--	2.2	1.8	1.6	1.5	1.3	1.2
Contingency	--	--	1.4	1.0	1.1	.9	.9	.8

---

*Office of Business Services, Metropolitan Junior College District, 1972-73 Budget, p. 56.

One may observe a decline in percent of expenditures devoted to administration. This reflects overall growth of the colleges and is now within the normal range of expenditure by public community colleges for that purpose. There has been a gradual increase in percent of expenditure for plant operation and maintenance. This is to be expected until permanent facilities are available throughout the district.

Percent of expected revenue by source and of expenditure by function are shown. These projections reflect an increase in state funding from $320 per FTE student to $400, retention of the current student fee structure, maximum tax levy of 15¢, and annual increment of 10 percent for each expenditure function except plant operation and maintenance where the increment was 15 percent during 1973-74 to offset the first full year of operating the Penn Valley permanent campus.

TABLE 31

AMOUNTS OF ACTUAL AND PROJECTED OPERATING EXPENDITURES

Year	Total Operating Expenditures Totals	General Fund Revenue	Total Operating Expenditures Per FTE
1964-65	$ 1,418,778		$617
1965-66	2,143,649		615
1966-67	2,725,844		829
1967-68	2,965,296		813
1968-69	3,239,995		783
1969-70	4,539,546	$4,581,930**	893
1970-71	5,444,276	5,859,520**	841
1971-72	6,849,529*	7,045,515**	921*
1972-73	8,150,241*	7,766,766	953*
1973-74	9,376,725*	7,959,770	922*
1974-75	10,289,397*	8,296,829	896*
1975-76	11,293,337*	8,601,550	886*
1976-77	12,397,669*	8,895,946	880

---

*Projected by Office of Business Services, Metropolitan Junior College District, 1972-73 Budget, p. 56.

**Actual; others are estimated and projected (From MJCD Budget Planning Manual, 1973-74, p. 23).

Shown in Table 31 are the totals of actual and projected amounts of operating expenditure and operating expenditures per FTE. Shown also are actual and estimated or projected general fund revenues for recent and future years. One can see that there has been a gradual increase in expenditure per FTE over the previous fiscal years during which the total of annual operating expenditures has gradually increased. The total expenditure is projected to increase annually in the years ahead but due to an expected annual increase in enrollments, the FTE cost is expected to decline slowly after peaking in 1972-73. The college faces a deficit between general fund revenues and expenditures after 1972-73. Assumptions of FTE enrollment levels were as follows:

1972-73 - 8,555
1973-74 - 10,165
1974-75 - 11,485
1975-76 - 12,749
1976-77 - 14,093

The patterns of expenditure for general operating purposes at each of the colleges is shown in Table 32 for the recent five year period. While, in general, the pattern is similar, there are some differences which reflect local conditions one of which is size of enrollment. For example, the larger the enrollment the smaller is the percent of operating budget expended for the function of administration. The nature of physical facilities is also reflected in the percent expended for plant operation and maintenance.

Presented in Table 33 are the percents of revenue expended and budgeted for college operation, exclusive of expenditures by the district,

TABLE 32

PERCENT OF OPERATING EXPENDITURE BY FISCAL YEAR AND FUNCTION FOR EACH COLLEGE[1]

College by Fiscal Year	Instruction	Instructional Resources	Administration	Student Pers. Serv.	Plant Opr.&Maint.	Other
Longview						
1968-69						
1969-70	66.8	3.2	8.2	10.8	11.0	--
1970-71	66.4	3.7	7.4	10.2	12.2	--
1971-72*	65.5	4.5	5.4	10.5	12.7	1.3
1972-73*	69.6	3.4	5.1	10.2	10.1	1.7
Maple Woods						
1968-69						
1969-70	60.0	5.1	11.1	11.4	12.3	--
1970-71	63.2	4.5	9.9	10.2	12.2	--
1971-72*	60.6	5.9	8.6	10.8	12.9	1.1
1972-73*	61.7	5.1	7.0	11.7	12.6	1.8
Penn Valley						
1968-69						
1969-70	71.0	4.0	4.4	9.5	11.1	--
1970-71	71.0	4.2	6.0	9.1	9.7	--
1971-72*	71.0	4.7	3.1	9.7	9.8	1.6
1972-73*	64.7	7.2	2.9	8.6	14.9	1.6

---

*Budgeted.

[1] Metropolitan Junior College District Office of Business Services, Unit Cost Study, p. 6 and 1972-73 Budget, p. 15 ff.

TABLE 33

PERCENT OF FTE STUDENTS AND OPERATING EXPENDITURES
ALLOCATED FOR EACH COLLEGE

Year	Longview		Maple Woods		Penn Valley	
	Expenditures	Students	Expenditures	Students	Expenditures	Students
1968-69						
1969-70	25.7	23.7	18.6	16.3	55.6	59.9
1970-71	27.0	28.4	22.0	18.5	50.9	53.1
1971-72	29.2	30.8	19.5	18.8	51.3	50.3
1972-73	28.2	--	18.4	--	53.4	--

for each of the colleges. One can see, for example that the operating expenditures at Longview, Maple Woods, and Penn Valley for the fiscal year 1969-70 were 25.7, 18.6, and 55.6 percent, respectively, of the total amount expended by the three campuses for operating purposes. Shown also are the percents of total FTE (district residents, Missouri resident out-district, out-of-state) served by each college. It can be seen that in 1971-72 the percent of FTE students served and the percent of expenditures was close.

2. Capital

For planning purposes it is important to know the status of debt retirement, the schedule of amortization, and the amount of debt retirement levy required. Data displayed in Table 34 show that the existing debt outstanding will be fully amortized in 1990. Shown also is the required debt retirement levy assuming the equalized assessed valuation increases as projected and the collection rate of taxes is approximately 94 percent.

TABLE 34

ESTIMATED LEVY REQUIRED FOR SERVICE OF EXISTING DEBT

Year	Principal Amount	Coupon Interest	Debt Service to be Financed by Taxpayers*	Estimated Assessed Valuation (In Thousands)#	Retirement Levy**
1972	$ 1,260,000	$ 988,700	$ 2,188,700	$ 1,719,304	14¢
1973	1,260,000	927,150	2,030,258	1,783,400	12¢
1974	1,260,000	865,600	1,968,708	1,849,885	11¢
1975	1,260,000	804,863	1,907,971	1,918,849	10¢
1976	1,260,000	744,938	1,848,046	1,990,384	10¢
1977	1,260,000	686,925	1,790,033	2,064,585	9¢
1978	1,260,000	630,825	1,733,933	2,141,553	9¢
1979	1,260,000	574,726	1,677,834	2,221,390	8¢
1980	1,260,000	518,625	1,621,733	2,304,203	8¢
1981	1,260,000	462,525	1,565,633	2,390,104	7¢
1982	1,260,000	406,363	1,509,471	2,479,207	7¢
1983	1,260,000	350,013	1,453,121	2,571,632	6¢
1984	1,260,000	293,538	1,396,646	2,667,502	6¢
1985	1,260,000	236,425	1,339,533	2,766,946	5¢
1986	1,260,000	178,550	1,281,658	2,870,098	5¢
1987	760,000	129,300	732,408	2,977,095	3¢
1988	760,000	87,525	690,633	3,088,081	2¢
1989	760,000	44,475	647,583	3,203,205	2¢
1990	510,000	11,475	364,583	3,322,620	1¢
Totals:	$21,690,000	$8,942,541	$27,748,485		

---

* Assumes a Title III Interest Subsidy Grant annual deduction of $96,892 or a total amount of $1,744,056 during the period 1973-1991; and, an annual income of $60,000 from investments.

# Based on the assumption of an annual increment of 3.728.

** Assuming a 94% Collection Rate and that the fund balance accommodates rounding to nearest whole cent.

CHAPTER V

COMPARISON OF DEVELOPMENT AND PREVIOUS RECOMMENDATIONS

Introduction

The purpose of this chapter is to present a comparison between the status of development in the Kansas City Metropolitan Junior College District and previous recommendations and planning parameters. The focus of concern is upon the ways in which development at this point in time coincide with or differ from the recommended pattern of growth and development recommended at an earlier time. After considering the evidence at hand following a comprehensive long-range planning study in the year 1967-1968, we concluded that a comprehensive community college was greatly needed and recommended that it should be developed with all possible speed consistent with sound educational planning and administrative procedures.

Physical Facilities

The acquisition by the Board of Trustees of three sites, one in the central area bounded by 31st Street on the north, 33rd Street on the south, Southwest Trafficway on the west, and Broadway on the east, one in the northern sector of the District in the vicinity of Highway 152 generally at or between the intersections of Highway 1 and Highway 69, and one in the southeastern sector of the District near the centroid of Lee's Summit, Raytown, Hickman Mills, and Grandview coincides with the previous planning recommendation. All campuses have been developed simultaneously as recommended. Interim facilities were provided in the north and south campuses and at both the campuses construction of a permanent student services center and instructional facility is underway. The first phase construction of permanent facilities at the central campus to accommodate 3,500 full-time equivalent day students is completed and the facilities are occupied. Due to unforeseen circumstances, occupancy of the first permanent buildings on the Central Campus followed by approximately 16 months the recommended time schedule for occupancy in September 1971. The land and building at 560 Westport Road was purchased as recommended and now houses the Central District offices. Development of physical facilities is on target. A recommendation was that planning for the second phase development to the end of the decade should begin no later than 1974, and this effort has been initiated.

The 1967-68 long-range planning study recommended that the second phase of development should include (1) construction of facilities at the Penn Valley Community College campus to house an additional 1,500 full-time equivalent day students, (2) new construction for complete development of the Maple Woods Community College campus to accommodate 2,500 FTE day students, and (3) new construction for complete campus development to accommodate 4,500 FTE day students at Longview Community College.

Finance

In view of a critical need to meet its anticipated operating budget needs around the year 1974-1975 and to cope with an expected imbalance between revenue and expenditures, a number of recommendations were made for the MJCD to increase its levels of revenue. These recommendations included:

1. Utilizing all forms of available financing methods to develop and operate the system.
2. Issuing self-liquidating revenue bonds for construction of student unions on each of the three campuses.
3. Obtaining maximum federal aid for eligible building construction.
4. Seek revenue bond financing, special State grants, and private investment to develop parking structures for the Central Campus and charge users (students) a minimal fee consistent with practices elsewhere in the state.
5. Plan for a second general obligation bond issue to be authorized in the early 1970's.
6. Seeking an increase to 20 cents per one-hundred dollars of assessed valuation in the statutory limitation, on the maximum tax levy that can be imposed by a junior college district without voter approval.
7. Promotion of a change in the state aid formula to more realistically reflect current costs of education.
8. Seek and promote a state scholarship fund so no potential student is denied an education because he lacks the financial resources.
9. Take steps to ensure that a proper share of federal money such as may become available for vocational and/or occupational and adult education is allocated to junior colleges by the state director of vocational education.
10. Evaluate tuition charges in the light of current and future increases in operating costs, in the proper perspective of the cost of attendance at other two-year institutions, and in terms of the open door admissions policy. Only after all other sources of financing have been exhausted should tuition rates be increased.

All available financing methods except one have been used to operate and develop the system including the issuance of revenue bonds to help finance the student centers. Adequate parking structures using private investment have not been fully developed for the Central Campus. A second general obligation bond issue is being planned for submission to voters for authorization. The tax levy was extended from $0.10 to $0.15 per one-hundred dollars of equalized assessed valuation in the MJCD. State reimbursement has been increased from $320 to $400 per FTE. No state scholarship fund has been authorized. Steps were taken by college officials to obtain a proper share of funds for occupational and/or adult education which have become available from federal sources. Student fees were raised substantially beginning in the 1969-1970 school year. Projections of total revenue made in 1967-1968 were based on the assumptions that one-half the FTE would be in occupational education programs by 1974-1975. It was assumed FTE costs would reach a level of $800 per student for transfer programs and $1,200 per student for occupational programs. While no accurate data on costs per program are available, the FTE operating expenditure level and present percent mix of students in collegiate transfer and occupational education would indicate these estimates are fairly close. The imbalance between operating general fund revenues and expenditures has occurred as forecast. Voters in the MJCD did approve a bond issue of $25,220,000 in 1965 which was used to provide campus facilities. The assessed valuation has increased at a higher rate since 1968 than the 3 percent annual growth forecast.

Enrollments

Earlier enrollment projections were not exactly recommendations, but they formed the central basis on which a number of recommendations were based. Projections developed in this study on later benchmarks of change will differ. Actual enrollments which have developed differ in several significant ways from earlier assumptions about how they would and should develop. Head count and FTE MJCD enrollments were forecast to be 13,130 and 8120, respectively, by 1972-73, but they actually were 9,592 and 7,530, respectively.

Former enrollment projections assumed that the ratio of part-time students to full-time students would increase from 1.3408 to 2.5000. Instead,the ratio of part-time head count enrollments decreased to 1.234. A former assumption was that the ratio of full-time sophomores as a proportion of full-time freshmen would increase from .42 to .66; over the last three years the ratio has been .39. The ratio of unclassified enrollments to total full-time freshmen and sophomore enrollments was expected to increase from 5 to 12 percent. Instead the percent dropped from 31.2 in the fall 1971 to 7.7 percent in the spring 1973. It was also assumed that the FTE would change from 65 percent of head count to 60 percent. In fact, FTE as a percent of head count has been approximately 78 percent over the last four years. The most significant deviations in enrollment growth from the pattern expected have been in considerably smaller proportions of part-time enrollments and in a much higher attrition rate between the freshman and sophomore years.

Organization

The long range planning study included recommendations that there should be a chief administrator of the MJCD and a chief administrative officer of each campus. It was recommended that the campus administrators should be immediately responsible for community relations and development of educational programs consistent with community needs and the District's purposes and that the fully developed campuses should be given the capability of functioning autonomously within overall District policies.

To coordinate district development and operation, the creation of a District Advisory Council composed of student, faculty, and administrative representation was recommended to make recommendations on educational policies to the Board of Trustees. An administrative council was recommended to coordinate business matters and to serve in an advisory capacity to the chief administrator of the District.

A coordinating committee with representatives from interested community agencies was recommended to plan development of the Central Campus.

Periodic evaluations of progress by persons versed in institutional research were recommended. The development of a systems analysis approach to planning was suggested.

The most significant deviation from the earlier recommendations has been in basic organizational concept. Instead of three campuses of a single college envisioned earlier, the development of three colleges in a multi-institutional system has evolved by policy. Several district-wide coordinating bodies have been established to make recommendations on educational policies to the Board of Trustees through the chief administrative officer of the District. A body was created to serve as an administrative council to coordinate business matters and advise the chief administrative officer.

No systems analysis approach (Program Evaluation Review Technique -- PERT or other similar scheme) has been adopted and implemented. During the past year an organized institutional research effort has been implemented by the District office.

Programs

A major recommendation of the previous long-range planning study was that the Metropolitan Junior College District should adopt an open-door philosophy for admitting students to the College. While open-door admission to the College was recommended, the recommendation was also made that the admission of students to specific curricula or courses should be limited to those students who show promise of successfully completing the specific curriculum or course. To implement the open-door philosophy several recommendations were made as follows:

1. Offer developmental or remedial courses for those students who are not ready to enter regular courses or curricula. Initiate a pre-academic type program to salvage the potential transfer student.

2. Develop diagnostic methods to differentiate between those students who can be salvaged and those who are not capable of successfuly completing a collegiate transfer program.

3. Make available a wide range of courses and curricula to meet the differing abilities and objectives of students.

4. Establish several levels of courses in such fields as English, mathematics, physics, social science, etc.

5. Develop a quality guidance program which provides some degree of directive counseling, for excessive permissiveness in educational guidance can lead to confusion in the program and frustration for the student.

6. Provide for students whose abilities and interests do not indicate success in an associate degree program a wide variety of short-term and one year certificate programs.

7. Make available an impressive array of offerings at different levels of rigor in the evening continuing education program.

8. Provide for easy transition from collegiate transfer programs to less theoretical occupational programs for those students who insist on but are unprepared for the former.

The recommendation was made that occupational programs consist of these major components: general education, basic theory, and supporting technical and specialized occupational courses. A great deal of planning effort with industry, business, and governmental agencies for developing cooperative work-experience programs was recommended. Special ad hoc lay advisory committees were recommended for developing and monitoring occupational education programs. It was recommended that occupationally oriented curricula be planned around a cluster of occupations that have a common theoretical core rather than for a single highly specialized occupation so graduates become field oriented rather than job oriented. Thus they achieve greater mobility. Particular attention was drawn to the general clusters listed below.

Aviation
Business office, management, sales
Engineering - technical and industrial related
Health and medical technology
Services (public and private sectors)

Placement of most core requirements in the freshman year to be offered on all campuses was recommended for the following advantages:

1. This would assure that sophomores in any curriculum would have the same background of preparation and this would facilitate transfer for sophomore work at any one of the other colleges.
2. Small sophomore classes in some specialities would be more balanced by relatively large freshmen classes.
3. Programs with inherently low sophomore enrollments and/or very expensive programs could then be located at only one college in the District.

Occupational programs identified and recommended as needed were as follows:

Business Occupations Group

Accounting
Business management
Options: Merchandising
Banking and income
Small business

Business data programming
Options: Technician
Machine operator
Keypunch

Sales and advertising
Options: Commercial art
Fashion design
Copy-writer
Sales representative

Secretarial
Options: Executive secretary
Legal secretary
Technical secretary
Stenographer
Clerk-typist

Health Occupations Group

Dental office assisting
Inhalation therapy
Medical office assisting
Medical electronics technician (EKG, etc.)
Medical lab technician (ASMT)
Medical records secretary
Nursing
Options: Associate degree
Diploma
Operating room technician (surgical technician)
Unit management
X-ray technology

Industry/Engineering/Science Occupations Group

Air conditioning & refrigeration
technician

Aviation industry occupations
Options: A and P mechanic
Aircraft pilot
Air traffic controller
Counter & ramp personnel

Chemical technology

Drafting & design technology
Options: Architectural drafting
Mechanical design

Engineering technology
Options: Civil
Electrical/electronic
Mechanical
Engr. lab (general)

Industrial supervision
Instrumentation technology
Operating engineering technology
Sanitation technology

Service Occupations Groups

Community recreation specialist training
Educational (new medial) technology
Hotel & restaurant management
Fire service training
Law enforcement
Social worker aide training
Teacher aid training

Agriculture Occupations Groups

Agri-business
Agricultural technology

It was anticipated that by 1975, one-half the full-time day enrollments would be in occupational education programs. The estimated 1975 percentage distribution of enrollments in occupational education programs was as follows:

Major Program Category	Percent
Agriculture	2
Business	25
Health	20
Industry/Engineering/Science	35
Service	8
Other occupational	10

Another major recommendation was that the collegiate transfer programs should continue to receive full support for maintaining high levels of quality as the total college program expands. Stronger programs in the fine arts and performing arts which would be projected into the community itself were recommended.

The development of an extensive program of student personnel services was recommended which would provide for expanded guidance, counseling, and testing programs and for upgraded and organized job placement services.

A series of *ad hoc* advisory committees was recommended to develop and improve the community services offered by a college.

A major recommendation was that each of the three campuses should be planned for a full complement of facilities - academic, occupational and other instructional space; learning resource centers; administrative, faculty, counseling and placement offices; student unions; and spaces and facilities for recreation, music, drama and the arts. A citizens advisory committee established by the Board of Trustees was recommended to concern itself with broad issues of collegiate development. Several professional advisory committees were recommended to aid in the coordination of educational programs provided by different institutions and to promote better articulation between the Junior College and other elements of the regional educational system.

Several major deviations in the program development area are found when present status is compared to previous recommendations. They are:

1. No curricula have developed in the major program category of agriculture.

2. In the business occupations group, programs have not developed in sales and advertising with options in commercial art, fashion design, copy-writing, and sales representative.

3. Programs have not developed in medical office assisting or for medical electronics technician (EKG, etc.).

4. Programs related to the aviation industry have not seemed to thrive and no program has been developed for air traffic control or for ramp and counter personnel.

5. Programs have not developed in chemical technology, mechanical design, civil engineering technology, general engineering lab technology, operating engineering technology, instrumentation technology, or industrial supervision.

6. In the service occupations group recommended programs in educational media technology and for community recreation specialist training are not yet in existence.

7. About 31 percent of the full-time student enrollment, instead of the suggested 50 percent, are enrolled in occupational education programs. The percentage division between full-time day classified students is 34-66 in the spring 1973 instead of the 50-50 percentage division envisioned.

8. Instead of a 2, 25, 20, 35, 8, and 10 percentage enrollment distribution in agriculture, business, health, industry/engineering/science, service, and other occupations, respectively, the percentage distribution was 0, 34, 20, 18, 17, and 11 percent, respectively, including data processing in the other occupations category. The percentage enrollments in business is considerably higher than predicted and the percentage enrollment in industry/engineering/science is considerably less than forecast. Enrollments in the health technologies is identical and considerably higher than forecast in the service occupations group.

9. Programs in the fine arts and performing arts that are projected into the community have not been developed fully.

The policy of open-door admissions to the colleges was adopted but sufficient application of diagnostic methods, developmental and remedial services, and directive counseling approaches have not been implemented. Programs of student personnel services are uneven in their rates of development.

Use of ad hoc advisory committees to develop community services has been sporadic and community services throughout the MJCD have not developed extensively. While extensive use has been and is being made of ad hoc lay groups in the identification and definition of need for and development of occupational education programs continued utilization of this means for monitoring and evaluating occupational programs has not been employed. Except in some business program areas extensive efforts have not been made with business, industry, and governmental agencies to develop cooperative work experience programs.

A full complement of facilities is being planned and implemented on each college campus. Although several district-wide professional advisory committees were established to aid in the coordination of the programs, only limited development has occurred in the establishment of region-wide committees, primarily in occupational education, to promote improved articulation such as in the field of guidance and counseling.

CHAPTER VI

MANPOWER NEEDS INDICATED BY LOCAL RESIDENTS AND CONDITIONS

Introduction

On January 8, 1973, a meeting was held in Kansas City, Missouri of executives from 21 business, industrial and government enterprises representing 103,174 employees in the Kansas City, Missouri Metropolitan area. Organizations represented were as follows:

The Bendix Corporation
Trans World Airlines
Ford Motor Company
Cook Paint and Varnish Co.
Motor Car Dealers Association
Kansas City Power and Light Co.
City Manager Office, Kansas City
Chemagro Corporation
Armco Steel Corporation
Western Electric
Commerce Bank of Kansas City
Kansas City Area Hospital Association
Sears Roebuck Company
U.S. Civil Service Commission
Milgram Food Stores, Inc.
Business Men's Assurance Co.
Wilcox Electric, Inc.
Yellow Freight System, Inc.
Federal Reserve Bank of Kansas City
Hallmark Cards, Inc.
Marion Laboratories

A second meeting attended by executives of medium and smaller enterprises was held on February 19. These executives represented approximately 30,800 employees in the Kansas City Missouri area. Organizations represented were as follows:

Joseph J. Oshivon, Architecture
R. H. Macy Co.
Black and Veatch, Consulting Engineers
Butler Manufacturing Co.
Brickman Advertising, Inc.
Environmental Protection Agency
Clay County Medical Association
John Holman, Dental Arts
Parkview Gem, Inc.
Ray Smith Ford, Inc.
Crown Center Hotel
Yellow Freight System
United Telecommunications, Inc.
Shafer, Kline & Warren Engineers
Rosehill Gardens, Inc.

Representatives of Metropolitan Junior College District and of Arthur D. Little, Inc., attended to learn: (1) what types of future needs were anticipated by executives for qualified manpower at the technical and semiprofessional (middle manpower) levels; and, (2) reactions relative to experience in employing graduates of MJCD educational programs. Participants were reminded that the discussion was to relate to those jobs for which it is desirable or essential that employees have more than high school education and training but less than a bachelor's degree. Each executive was invited to give information in two forms: (1) an oral presentation of future manpower requirements as he saw them in the foreseeable future, a varying period of time up to five years, depending upon the type of enterprise represented, and (2) written response to a listing of different types of technical and semi-professional occupations needed and related questions. Presented first are the data on specific needs from written responses followed by the comments made in the oral presentations. The latter are presented as part of this chapter rather than in an appendix, for the comments convey in some cases better than bare statistics significant meanings intended by the executives involved. We feel there are some very important implications for further college curriculum development.

Part I - Manpower Needs Identified by Employers

Anticipated Need for Qualified Manpower

Representatives of firms and agencies were asked to check from a list, the types of qualified manpower for which there is expected to be future demand in their organization. In addition, they were asked to write the name of additional types for which future demand was expected that might not have been included in the listing. Types of manpower included in the list were determined by a series of in-depth interviews with persons in agriculture, business, health/medical/dental, industry/engineering/ science, and service enterprises and identified as manpower needs of the Greater Kansas City area in a previous 1968 study.[1] Shown in Table 35 are the types of qualified manpower by number of representatives from group 1 and 2 indicating a future demand.

In interpreting Table 35, the number of times a given type of qualified manpower was indicated is not necessarily important to the identification of need. In some instances the one person checking an item may represent 10,000 - 20,000 employees. In other words, if ten persons each employing under 50 employees checked an item it might not indicate as much need as if one person from a firm employing 3,000 had checked the item. An essential factor in interpretation of Table 35 is that if an item has been selected even once, it is validation that a manpower need which was recognized in 1968 is still felt to be a need for the future. One can deduce from the data that a heavy demand is foreseen for secretarial, stenographic, accountant, clerk-typist, data programmer, and data processing technician of employees. In addition to the data presented in Table 35, discussions strongly corroborated the need for secretarial, clerical, and kindred workers, data processing operators and technicians, and accounting technicians. Other types of needs were chemical laboratory assistants and technicians, electrical technicians, mechanical technicians, engineers and engineering technicians, industrial technicians, sales personnel, credit analysts who know insurance and real estate, para-medical technicians and nurses, waste water technicians, and business managers. Strong emphasis was placed on the development of interpersonal skills, ability to communicate, and the skills of logic as attributes to be developed in employees. Types of manpower for which need was not

---

[1] Arthur D. Little, Inc., A Development Program for Metropolitan Junior College -- Kansas City: Volume Two Guidlines for Development, May, 1968. Pp. 65-6.

TABLE 35

TYPES OF QUALIFIED MANPOWER NEEDED

No. of Responses Grp 1	No. of Responses Grp 2	Type of Employee	No. of Responses Grp 1	No. of Responses Grp 2	Type of Employee
1	2	Agri-business specialist	4	1	Electronics technician (communications)
1	2	Agricultural technician	7	0	Electronics technician (computer)
16	13	Secretarial	6	1	Electronics technician (industrial)
15	7	Stenographer	3	1	Electrical power technician
16	9	Clerk-typist	2	2	Engineering laboratory technician (general)
17	6	Accountant			
11	7	Data programmer	0	4	Architectural draftsmen
14	6	Data processing technician	8	5	Drafting & design technician
4	5	Credit & collections supervisor	5	2	Industrial supervisor (foreman)
1	0	Insurance salesmen	0	2	Service representative
2	0	Banking & finance personnel	2	2	Instrumentation technician
4	5	Merchandising & marketing personnel	4	2	Air conditioning heating/ refrigeration technician
1	3	Advertising layout man & copy writer			
0	2	Assistant buyer	6	0	Operating engineer
0	3	Traffic manager (shipping & receiving)	2	2	Sanitation technician
			1	0	Heavy equipment operator
4	2	Outside salesmen	1	0	A&P mechanic
4	4	Sales representative and/or estimator	1	0	Aviation transportation agent
			1	0	Airline reservation agent
1	3	Commercial artist	1	0	Air traffic controller
0	0	Fashion designer	1	0	Aircraft electronics technician
1	0	Dental office assistant	4	0	Automotive technician
1	1	Medical office assistant	2	1	Cafeteria manager
2	1	Medical laboratory technician	0	1	Hotel & restaurant manager
3	1	Registered nurse (associate degree)	2	2	Food preparation specialists
			1	0	Community recreation aide
2	0	Surgical technician	0	0	Teacher aide
1	1	Medical records secretary	0	1	Educational audiovisual technician
1	0	Unit manager (nursing station)	1	1	Social worker aide
1	0	Inhalation therapist	1	0	Law enforcement officer

TABLE 35

TYPES OF QUALIFIED MANPOWER NEEDED
(Continued)

No. of Responses		Type of Employee	No. of Responses		Type of Employee
Grp 1	Grp 2		Grp 1	Grp 2	
1	0	X-Ray technician	1	0	Firemen
1	2	Dental technician	0	1	Urban development aide
1	0	Aeronautical engineering technician	1	0	Chemical lab. technology*
			1	0	Management trainee*
1	2	Chemical engineering technician	1	0	Maintenance men*
1	4	Civil engineering technician			
4	2	Mechanical engineering technician			

---

*Added by group 1; types of additional manpower needed and cited by group 2 were: accounting clerks, hotel and restaurant supervisors, construction technicians, technical writers, telephone technicians, graphic artists, and people with biological and chemical science backgrounds.

foreseen by firms and agencies represented in group one were: assistant buyers, traffic manager (shipping and receiving), fashion designer, architectural draftsmen, service representatives, hotel and restaurant manager, teacher aide, educational audiovisual technician and urban development aide. However, except for fashion designer and teacher aide, each of these types of manpower were cited as needed by one or more executives in group 2. Various types of manpower needed by organizations represented in group 1 were not identified by group 2 participants. Three fields identified by group one not in the listing were: chemical laboratory technician, management trainee, and maintenance men, the last three types appearing in Table 35. Additions by group 2 are shown in a footnote to Table 35.

We wish to take note that, as mentioned by several executives in the discussions, it is difficult for employers to identify future job demands and the need for training programs partly because the demands change so rapidly. It is difficult to predict what the needs will be in five years (about the time required to plan, initiate, and turn out the first group of graduates in a new community college program. Also, jobs at various skill levels and levels of responsibility are not always filled by persons with the optimum training for that particular job. Union requirements, seniority, wages and hours constraints, etc. all work to invalidate the simplistic notion that we can identify job requirements, train persons to be competent in those jobs, and then place them directly with companies holding jobs open for persons with their talents. This ideal schema works sometimes, but all too often it does not. Here are some examples of why it doesn't work:

1. Good, satisfying technician jobs are typically regarded by the union as positions which are theirs to fill, and that the company should train employees in lower classifications to "trickle up" into such jobs--on company time.

2. With baccalaureate-degree engineers, chemists, physicists, teachers, etc. in over-supply, companies will hire these persons into paraprofessional and technician jobs, even though they were not trained as technicians and are not really job competent. "They can learn fast," is the rationale.

3. Many technician jobs are "one-of-a-kind" at a given company or agency, and a "bright young employee" can be trained on-the-job for the new responsibility.

4. Some companies feel that well-trained technicians (new two-year college graduates) will tire of technician work and leave to "go on to college." So, they'd rather take the less-well-educated person and train him to minimal competence. He's "happy" to be a technician and will stay.

5. Some companies need large numbers of mid-management employees whose most important "skill" is human relations. So they hire "bright" high school graduates in entry (menial) jobs; observe them carefully and pick those for promotion who exhibit the personality characteristics they're looking for.

6. Etc.

Conditions Relating to Employment of Technical and Semiprofessional Workers

Executives from all 36 enterprises represented in the two meetings indicated there were opportunities for employment in their organization for people with two years of technical or semiprofessional training beyond the high school. All encouraged employees to find job upgrading educational experiences, and some financially subsidize employees for this purpose.

Sixty-two percent of the executives in the first meeting and 47 percent in the second meeting, or 55 percent of both, indicated that employees with two years of training beyond high school had replaced or supplemented some of the college graduates in their organization. Of the first group a third indicated this was not the case in their organization and 5 percent did not respond, while in the second group 26 percent thought "perhaps" some employees with two years of post-secondary training had replaced or supplemented four-year college graduates and 27 percent indicated this was not the case.

The ways in which two years of post-high school training was recognized in the organizations represented in the first group were: (1) job advancement (14 or 66 percent), (2) higher pay (12 or 57 percent), (3) initial hiring advantage (17 or 81 percent), and (4) greater job satisfaction (1 or 5 percent). Two-thirds of the second group recognized two years of post-high school training by job advancement; 80 percent recognized the training by initial hiring advantages. About 47 percent recognized this level of training by higher pay, and one placed greater responsibility on such persons.

Eighty-six percent of the enterprises represented in the first group and two-thirds in the second group, or a total of 77 percent, indicated they found it necessary to recruit employees from outside the Kansas City Metropolitan area. The most frequently mentioned reason was shortage of qualified local persons.

Twelve (57 percent) of the executives in the first group were of the opinion that existing educational facilities in the area were only "fair" in meeting the off-the-job training needs of their employees. Eight (38 percent) thought the existing facilities for their purpose were "excellent," and one (5 percent said they were "poor." Sixty percent of the executives in the second group believed that extent to which existing educational facilities in the area meet the off-the-job training needs of employees was "poor," another third considered them "fair," and 7 percent thought they were "excellent." Three-fourths of all executives indicated existing educational facilities in the area were "fair" or "poor" in meeting the off-the-job training needs of employees. A fourth felt they were excellent.

Nearly all of the larger firms (90 percent) operate organized training programs for employees as did over one-half (53 percent) of the others. Representatives of nearly all (91 percent) of the firms with an organized training program indicated that a more expanded college program of job improvement education could supplement or replace totally or partially their existing educational programs. Two-thirds of the executives in the first group and all in the second group, or a total of 81 percent, indicated they would be interested in participating in further study or discussion at a later date with MJCD officials concerning the need and advisability of developing more realistic programs of job preparation, upgrading, or retraining. One-third of the first group indicated "perhaps" they would be interested.

Manpower Needs Discussed by Executives in the First Meeting

1. Western Electric

The particular areas of interest that we're in at Western Electric from the college standpoint are engineering-oriented areas in the technical field. We are interested in people who have courses in electronics, solid state electronics, drafting, chemistry, math and statistics. One of the needs we have is for people who have a technical or engineering background and additional education in cost accounting. We require people in the office with typing and shorthand. In the data processing field we need computer operators. In the office and clerical skills area we normally hire people in at the clerk typist entry level who progress up to the secretary level. We need secretaries and believe me they are becoming more and more scarce. Our company employs locally approximately 25 key-punch operators, 80 or 90 secretaries, 125 to 150 typists, approximately 10 computer operators, 75 electronic technicians and 245 engineering associates. These associates are semi-professionals, people with technical background who are more or less engineering helpers.

2. Kansas City Power and Light Company

The Kansas City Power & Light Company has three categories of employees: (1) people who come to us from college, (2) certain types of mid-level technicians and then (3) the great bulk of our people who are hired in after high school and then trained. We hire a great bulk of our people either at the top level, that is from the colleges, or directly from high school. We do the great bulk of training of our technicians. Therefore, our main interest is in individual courses; algebra, trignometry, statistics, theory, electronics, this sort of thing! We do hire a few types of people the sort you might be training in your college. We hire a great many automotive mechanics. These are people we generally hire in as garage servicemen and then train them on our own time through our apprentice programs. We feel that with the wage rates that we have that we can very well hire graduates of the shcool here as garage servicemen, give them a little bit of training in our way of doing business for a year or so and then they would be eligible to go rather rapidly through our apprentice training program. We train our own computer people but there are various parts that we think you people might be able to do for us. I must say that Kansas City Power & Light Company does not hire a great many people each year; we are a relatively stable company, not a rapidly growing company in terms of employment. I don't suppose our employment has increased over 5 percent in the last 10 years. We see the bulk of our needs as job-upgrading in that or this course. One more thing, give us people who can read and write, organize their thoughts, and know how to express them.

3. The Bendix Corporation

Bendix is quite heavily oriented in the engineering discipline. The majority of our hiring will be at the Bachelor of Science level - specifically the mechanical, electro-engineers. I want to pass on a comment that we at Bendix hear quite often on a college campus when we interview. We will interview, for example, a young man at K. State or Rolla or Columbia. He will graduate from high school, go directly into college and in four years obtain a Bachelor of Science degree. The next half hour you might pick up a gentleman who attended junior college and then went to K. State or KU and it has taken him 5 years out of high school to obtain his degree. If you ask him why it took 5 years to obtain his degree, almost every answer will be "Well, when I left the junior college and went to the university, I lost so many credit hours that I had to go an extra year." From my own experience I would say that 50 percent had changed their discipline or goal in the middle of the stream. About 50 percent will come back and say, "I always did want to become an engineer but didn't realize I would lose that many credits and didn't find out about it until after I had completed my two years and had contacted the university." He should have, out of high school, at that point made contact with the university. I think a little bit more communication with the counselors on your staff is needed in talking with the people about long-range goals, and if they want to attend Rolla or KU tell them to go there and talk it over.

4. Wilcox Electric Company

Wilcox Electric is currently recruiting engineers to the technical staff. There is a trend going on. In the past its been the people with the bachelor's degree primarily who have supplied a large number of lead engineers, and we see this trend as changing. Lead engineers are now people with master's and doctor's degrees. The people we are looking for are people with master's and doctor's degrees. We do find that the market for a bachelors degree is not very large because in most colleges, a great percentage like over half, are going on for advanced degrees. So the market for bachelors degrees is greatly diminished. What's happening is that it is creating a wider gap between the technician that is available and the engineer that we are hiring to manage the programs. What we need now, as I see it, is an advanced technician who can work fruitfully with the engineers with advanced degrees and carry on the bulk of the work. We can't afford, obviously, a man with a doctor's degree out in the laboratory experimenting with the gadgets. The technician is the fellow who should be supporting the engineers with the advanced degree. We have hired some three year technicians and are very happy with that group. They seem to be bridging the gap very nicely. Unlike the Light & Power Co., we cannot afford to train technicians. We do not have a large enough company to train our own people. We like to have them come to us fairly well accomplished and our needs are for three year technician graduates.

5. City Hall

From City Hall, I would like to concur with comments about secretarial people. We wonder where they are. It has been a continuing thing for the last two or three years. Yesterday, I think, there were 65 secretarial help wanted ads in the Kansas City Star which is probably some indication of the demand. I think your schools are aimed at one thing which is very helpful to us - training people for water and waste water programs, nursing and medical fields, long-range planning, secretarial science, and engineers.

6. Civil Service Commission

The Civil Service Commission actually only has 28 people in our own organization. I think I could speak for the federal service in the 6 county area and there are about 25,000 federal employees. I don't know the actual figures on turnover or how many people are hired each year, But I would guess about 4,000. Each year we ask all federal agencies for an estimate of their manpower needs for the next year. About a month ago we got back a printout showing how many typists, engineers, accountants, etc., on down the line to auto mechanics, laborers, warehousemen, etc., that the agencies reported. I didn't bring it along so I can't report the breakdown for each occupation, but we do have two examinations. We have two announcements directed primarily at the two year colleges; one is called the junior federal assistant examination and another one is physical science in engineering. Mainly these are technician type jobs. We have a number of jobs requiring education beyond the high school and below the college level. I can't give you the specific numbers. There are such things as air traffic control specialist, medical technician, accounting technician, electronic technician; almost anything that ends in the word technician would be in that category.

7. Trans World Airlines

At TWA the kind of person we are talking about is not like we were talking about four or five years ago, nor like we might be talking about four or five years from now. We have about 900 people in our mechanics classifications which are the real technicians in our business. The union agreement that we have is one which permits people to move up in the organization. A janitor can request consideration for bid, however, you might want to define it. For a job such as store clerk, he may have to take an examination - not too difficult for him to pass - if he is reasonably intelligent, has some experience in things like filing and that sort of thing, can get along fairly well with people, and knows his alphabet and so on, or a fueling examination to become a ground serviceman. Then those same people can apply for mechanic positions, if they have the qualifications for them. A janitor's job is not too bad with us and the rates we have in the airline business at the present time as well as the way they have popped up here in the last couple of years make janitor's work more profitable than many of the teachers with four years of college and a bachelors degree starting out in a rural community or the suburban communities around Kansas City. So if you look at it from the standpoint of economics maybe that's not too bad. Maybe the junior college could be preparing more of those people who might be encouraged to come in and take over a janitor's job and be on the seniority rosters and fight their way up to be an A&P mechanic.

We have a number of engineering technicians but with the airlines the way their equipment changes so rapidly, you start out with a 707 and the first thing you know you have three more kinds of 707's then you have a 727, then EC-9's - four or five kinds of airplanes in a three year period. What we usually do in getting our technicians is to go back to the people who have mechanical experience and put them into the engineering department to work with the engineers on modifications and things of that sort because they know what they are talking about and work with the engineers on the modification work. It is not the formal type of layout to the same degree that you have in other types of engineering. We do have some entering jobs of the machine operating type, but accounting clerks and others tend to move into those jobs in our organization by moving up a little bit if they are qualified or can be qualified. We hire a lot of key-punch operators but we help the civil service commission out quite a little bit; they hire them in January and February for income tax business and then they come on over to TWA along about March or April and fill our needs. It seems to me the technical training, or let's call it junior college, with us at the present time at any rate, is more along the lines of getting people ready for something else a little later when we do need them than it is getting them ready for something we can use them for right away. Secretarial concerns have been mentioned; we have the same problems. We don't have so much trouble finding applicants but, finding people who can do the job, read and write and run a typewriter is a little bit more difficult. We have to discount in terms of the numbers of employees we have, anything having to do with pilots and hostesses except for maturity and things like grooming, the psychology, and the sociology that would help them get along with people that might make them a better candidate when they show-up as an applicant for the job. As far as specific technical training is concerned it's not very likely that junior college could do that except in the kind of a program we might define or need and say "Hey come and help us do this kind of training." We've speculated on this kind of thing in several areas but it seems like those changes occur so rapidly in our equipment that we have never been able to get where we can do that.

We have our own training program for counter and ramp people after they are hired into those jobs. A good many of them are promotional jobs; people who work in the ramp service classification, baggage loading, etc., are frequently qualified to move over on the ticket counter. The local airport manager sees these people everyday and notices the kind of person the individual is, so when a job at the counter opens up they do move them in. They do hire a few people in the regular ticketing function directly from outside. They like to have people with something approaching an accounting background. This takes a lot of patience, and how you train for that I don't know, especially if you have a long line at the ticket counter and everyone of them angry because of something that happened; that's something we could stand a lot of training on.

8. Commerce Bank

From the banking industry I would emphasize that secretarial skills is a real dirge in the greater Kansas City area. We really need some people with secretarial skills that can go to work and do the full job. I would say in the accounting area, we don't really need bachelor's degrees and accounting majors but we do need some ability in accounting experience. Two year college graduates can be of real help and can find a place in the sun, probably up through cost accounting. Computer systems and auxiliary peripheral groups, key-punch operators, tab operators, junior programmers, any of these in this area in a junior college program versus the four year college. I think this has been shown by the need there. In the engineering area we would take someone with some preliminaries, if they have a stationary engineer's license. We use a lot of them in our building services and they are a little difficult to come by. I think that the dearth of people qualified to become stationary engineers is probably one point of concern in the area. I would just underline that we like to have people the high schools aren't really turning out – people who can communicate. If you could, give them some poise and maturity where they can communicate orally or understand oral communication, or be able to write something down on a piece of paper that you can understand what they are talking about. Probably this is the maturity and polish that the junior college, without going into a four year college career program, can augment along with these technical areas in the area of communications. "We use a number of people in the credit area. We have been, maybe out of necessity, going to the four year college or university graduate for that. If this could be handled at the two year college level, with emphasis on credit analysis, we would certainly take a look at it." It would be helpful to have people who are experts in insurance and real estate. We don't really have the demand for that as much as the commercial banking industry. We use this in our supervision of the commercial bank, in order to have competent people to analyze and do the spade work on commercial banks examined. In the central banking system, the banker's bank, the tellers system is quite different than the commercial bank's teller system. A commercial bank representative could speak to the need for tellers and the type of background required.

At Commerce Bank, we are training high school graduates. One thing in the teller business, we use someone with a little maturity. We have the same problem of people standing in line. I think there would be an actual need here; our turnover of tellers is not great; in our bank we have about 40 tellers. Credit, installment or retail credit, is a definite area of interest to us. We use a lot of people in our collections areas, BankAmericard facilities, etc. I don't know what they could actually give them in school for poise and maturity that would help them. We try to promote people from junior college or some college to a supervisory level, so I think we are talking more about general courses, accounting, business management psychology courses, and again I reiterate communications. We take people who have graduated from here; plus we will also encourage employees to go to junior college. We have been successful in moving these people into other banks in Missouri. I'm looking, I think, toward general business courses; bring someone along who can grasp banking.

9. Cook Paint and Varnish Company

Cook Paint manufacturers, distributes and retails in the greater Kansas City area. We employ about 700 people. We have a definite need for, not necessarily a college graduate because our stores are not necessarily big ones, the same skills and techniques and that is - how to make profit - how to read profit and loss statements, sales analysis, how to treat customers, how to deal with people, how to supervise, in other words basic business management courses. We don't think that our store managers need a four year degree. We start some of them out selling over-the-counter, we lose a lot of them this way; but, that might be good too. Credit, retail and industrial credits, and how to analyze customer's accounts, or potential customers, what to look for; these are more in the industrial business than retail. Retail is pretty easy, you can call the Credit Bureau. Our factory is controlled by the Union situation. If someone can read and write and get along with people he can start out, work his way up, and bid on the jobs. In our central offices we need key-punch operators, good ones. I don't know how many we ran through the last time before we could hire two, something like thirty, because we don't train them ourselves. We want trained skilled key-punch operators. We want skilled typists. We find that coming out of high school that the average typists speed on tests is 60 words a minute; we will discount because of nervousness and new equipment but if they get 40, we are lucky. If you all think you have problems with secretaries, we have an order in now for one that takes dictation, types, and knows chemical terms as long as your arm and can spell them; so spelling is important. We hire a lot of lab technicians, they need organic chemistry, basic training.

We use quite a few people who have a couple of years of organic chemistry. In the plant area, the mode of operation is becoming far more skilled and requires a high school graduate coming into our plant to have organic chemistry. Recently, we are looking for the fellow who has some chemistry and higher mathematics, probably coming out of junior college. I might echo the secretarial need. Secretaries need to know what their role is. Secretaries are a funny animal, they work for four or five people; five years ago they worked for one, but this is no longer true. When you get into this thing of what's a secretary, perhaps you can find somebody who can define it. I know we in our company, can't – so when you start looking for someone in that area he or she is going to be a different individual than in the past. We will be looking more and more for a two year chemist, I would be interested in some ideas how you convince a young lad or young woman that two years of chemistry is all they ought to shoot for. Our experience has been that when someone is involved in chemistry he is looking down the road for a masters or a doctors degree in chemistry. I really don't know that you can say whether the biology and chemistry should have a practical problem oriented focus or be the traditional typical kind of biology and chemistry that people take if they are going to follow through on a four year course. You've got a dilemma here in that you are looking for a good chemist someone who can help you, follow orders and those kind of things that you are going to specifically need, to say that you don't want the individual that doesn't have any more ambition to go on and get more chemistry, we're not saying this. What you are saying is that you would like somebody who can be useful and helpful in your operation and most likely there are going to be those kinds of jobs available with 10 to 15 hours of chemistry. Maybe you can get by with less. It's going to be a funny animal, I think the reality of the situation is going to be you are going to have the kind of person who can come in and work for your company and in a few years go on.

Another person commented that they are considering one man right now after exposure in the laboratory situation and a limited amount of formal training, we can put him on the road in industrial sales where he can really go to town and make money.

A college official commented, "It seems to me the development of a new kind of program, for lack of better terminology, would be a chemist assistant. I'd be interested in knowing whether or not you would be interested in pursuing an experiment along these lines. In fact, a person with two years of a rather structured chemical background, along with other things, might be suitable for your needs for the position you are talking about."

10. Kansas City Area Hospital Association

I am with the Kansas City Area Hospital Association. The hospitals in Kansas City employ about 25,000 so my comments are going to have to be kind of broad because I am trying to speak for so many kinds of hospitals. There are probably two or three things that are most important to recognize in the community college - one are the technical developments that are occurring in our country - a lot of spin-offs of the NASA Space Program are creating new kinds of diagnostic tools for examining peoples health and these in turn are creating new technical jobs that we never heard about three or four years ago; a job like inhalation therapy technician and EKG technicians, jobs like the kinds of people that run the heart-lung machines that you use for open-heart surgery; and we need new technicians to run the kidney-dialysis program for failing kidneys, the new kinds of X-ray technicians needed when you inject a guy with radio-isotopes and then you scan his liver or his kidney. It is just getting extremely complex, a lot of it because of the spin-offs of the NASA Space Program. The health care field is kind of unusual, if you get a new tool in industry a lot of times you can automate a procedure and do away with two or three people but the opposite happens in a hospital. If you get a new piece of equipment to treat somebody you usually have to add three or four people to your staff, one guy to operate it for each of the eight hour shifts a day, so we are kind of caught in a reverse effect of automation in the health care industry. So what that means to the community college is I think you must be very sensitive to the changing technology and the creation of new jobs that have new titles that just sound outlandish, like extracorporeal technologist. The community college had better be sensitive to the political climate in this country toward health insurance, national health insurance is a growing thing. In 1935 Social Security passed and then in the 50's Medicare was proposed, in the 60's it became a reality so that everybody over 65 could get any amount of hospital care they needed and would be paid for out of general tax revenues. Now in this present election there is a lot of debate and it has already been introduced as House Bill No. 1 in the Congress this year with the new Senate to provide some form of national health insurance making health care, hospital care, available to every citizen in the country regardless of his ability to pay. When this becomes a reality, whatever form it takes, we are probably going to experience a tremendous demand on the hospital system and on the health care system, and this again means there is not going to be enough workers to go around. So the community college has got to be sensitive to what happens politically in order to produce people to meet this demand.

The last point is a trend in the health care industry regarding the attitude that hospitals and large hospital associations are taking toward the educational systems. In the past all of our hospitals have tried to meet the need for patient care by creating a training program within the institution and the result of that is that many of our hospitals have many duplicating kinds of educational programs so that people don't suffer on the floor of that particular unit. It is extremely expensive to have educational people in the hospital setting, but it is necessary and so the movement I'm referring to then is a kind of a sense of beginning to shift back the educational component of training on to the school system so that the patient dollar is not completely overburdened by educational expense but that educational expense is borne by the community as a whole. Then the hospital will offer its space for clinical training that is necessary to go along with this. So we are going to see the hospitals, in general, looking more toward the community college for more support in the training of technical people that we have to have.

Now, a caution: some of the states have overproduced in health care. There are many nurses in Minnesota, Colorado and Washington that don't have jobs. That is not our problem here yet, because we have hundreds of vacancies for nurses here now and we just now recommended that you increase the number of nurses in your current program. You need to be sensitive to over producing, because we don't want people out looking for jobs. This is why we have recommended to many other schools that they not get in to the health care training programs because there are already a couple of programs in town doing it and we would rather see them expand a little bit than start up another program because they are going to duplicate. Health care programs are expensive, because you have tremendous commitments to equipment and teaching staff.

Be sure and use the associations when you deal with industry for training programs. Try and avoid too specific a training program. If you go to one company and produce the ten or fifteen people they are going to need, then next year you are going to produce ten or fifteen people that another company won't accept. Or they'll accept them but then they will have to start their own on-the-job training program to be sure they are doing the right procedures for that company. The same way with hospitals; don't start a training program for one of our hospitals without going through the associations. We can bring all of the hospitals together at the same table and help them come to some agreement; then your graduate will have a job in eight or ten places and we won't have eight or ten hospitals trying to meet different training needs for what they think is a different need.

The community college is probably the most relevant thing around. You have people in your programs who have bachelor's degrees in English and history and they don't have a job. They are coming back to the junior college to take in a two year program in inhalation therapy or learning how to be a unit manager in order to go out and get a job. They don't have anything that really enables them to go to work in industry; you guys are in a golden position. You can make life and work really relevant for high school graduates. What you train them for they will be able to use. I think perhaps education has gone too far in the pursuit of liberal graduates.

There are a lot of poor profit schools around this town: schools of real estate training, schools for training airline stewardesses, schools in for training medical and dental assistants, etc. We cannot employ those people because they don't have the proper clinical experience in our hospitals, yet those kids have spent a $1000 to $1500 worth of tuition to go and get educated in this area. I wonder why? What is going on here? Is somebody just doing a snow-job on the people or is the school system not meeting a real need. At any rate you might explore that. It needs to be looked at to see why those poor profit schools are so extremely sucsussful when we are all contributing to a tax-system to do this on a shared basis.

About maturity, in hospitals we say we need an older nurse cause sick people are very sensitive and you have to be very mature to deal with people in a crisis. Yet we have learned that you can teach this to very young people. If you design a course properly you might give this kind of a course to everybody in this college who is going into a career that is dealing with people. What I have reference to is perhaps an eight weeks course designed by a psychologist that teaches young people how to listen, how to control their emotions, and how to say the proper things back without offending. This is something that doesn't have to come with age, you actually can teach it and this may be an area you might want to look at.

11. Ford Motor Company

At Ford Motors we are looking at the technical qualifications which are important, but we are also looking at the communications skills which are very important. This was brought out by several people. We look also beyond that to capability in troubleshooting, decision making, or just plain troubleshooting. We will probably utilize the services of Maple Woods, Longview and Penn Valley to supplement our internal training, apprentice training as well as to provide individual courses that our people seem to think they need. We are particularly impressed with the fact that you have in your current staff people from industry, and this makes sense to our guys and I think it is a big factor in our, hopefully, in the future being able to make use of your facilities.

12. Marion Labs, Inc.

Marion Labs is somewhat like the iceberg, a very small part of us exists for Kansas City. We do have a large field sales and a marketing organization. Generally we have taken people with one to two years college chemistry or biology. We are gradually moving to the three to four year individual to go out and represent and sell products in the health care field.

In our labs we have need for lab technicians, most of ours are analytical with knowledge of instrumentation and various lab instruments that are needed. We are in the metric system. I think this is one thing that is growing in the years ahead and all of our people have to understand the metric system as well as knowledge of the numeric system. In the secretarial, it would be wonderful to get a girl who could type, spell and who knows English. It seems that this is a real breakdown in the American society, not only for the gals but for the men too. But being able to type a piece of material and then look at it and know whether it is correct or not is a real asset. I would say that at Marion we offer all of our people an opportunity to continue their education. We have a number going to Longview and some are going downtown. As long as he or she is pursuing a program that would benefit Marion, we pay the tuition.

13. Yellow Freight System, Inc.

Yellow Freight System headquarters is in Kansas City. As far as the main office is concerned, we have for the past number of years had a program of recruiting college graduates and MBA's and directing them to our management training program for supervisory training. These people have come from all over the country. Our custom has been to train them ourselves, give them their background, and then use them over the county where we find that we can put them in on some lower supervisory level and have them work toward being terminal managers and come into the general office. We have a great need from time to time for truck drivers. Now, whether or not there has been contemplation of a community college curriculum as mundane as operating a drivers school, I don't know. There have been some schools which have not been successful that have attempted to do that in this community. The requirement for over-the-road drivers is rather stringent, there is always that question of how a man can get some drivers experience that you demand when he can't get out on the road to get it? So far as our Kansas City operation is concerned, I would reiterate what has been said about secretarial help. We do have turnover there; we do have on file applications from people who are qualified as secretaries. We use junior accountants, also.

One of the areas is rate-clerking. In the traffic department we find not enough confident rate help who can read tariffs and that sort of thing. We have a department called "Planning" which utilizes a graduate economist, a civil engineer, etc., who are engaged in trying to define our marketing areas and such things, for example, as whether and where we might place the great bulk stations. These fellows are highly educated to solve logistic problems and could perhaps use some para-technical help, although I can't speak too well for that. We have a large computer operation in our general office here which is rather stable in its need for programmers and technical people. We have what we call dispatchers who are operating; they are the utilizers of this computer technique we have.

14. Wilcox Steel, Inc.

Wilcox Steel has special problems which may reflect some problems in the community. Journeymen skilled craftsman, electricians, pipe fitters, welders, machinists, auto mechanics are needed. We operate our own apprentice program. At one time or another we underestimate our requirements and run short in coming up with journeymen. Whether it is economical for each one of us to run our separate kinds of apprentice programs is a question. Perhaps we are suggesting that the schools could do something in terms of coordinating higher level education beyond high school in preparation for these related studies for some of the smaller firms. Another area is this business of diagnosing problems in the automobile or in an electronic circuit. It is a logical analysis of a problem, yet if you look through the curriculum this type of logic course is not taught as a part of an electronics course. Logic itself, coming up with relevant answers, is something that appears to be lost out of the curriculum.

As to management positions, in most cases, we find ourselves in a position where it is not feasible to hire a graduate engineer who we would like to have alternately as a supervisor in the plant because he is not going to stay around pushing brooms long enough to learn something about the steel industry or many other things to the point where he would be a satisfactory engineer to be a supervisor. So we are more inclined to look for a guy coming out of high school who will work and achieve some more education as he goes along which may be related. This seems to be a part where you fit in that becomes a little difficult because we have rotating shifts which kill a guy if he goes to a regular program. Plus we have resorted to some kinds of in-service classes but, for us, the day of hiring an engineer to be a supervisor is out of the picture. We hope that he will become an engineer some time after he has developed enough service. This means a high school graduate picking up additional education as he goes along so that by the time he has experience for a qualified supervisor then he has the additional education.

15. Sears Roebuck Company

Retailing today is changing and if anything is constant it is change. One of the things we are experiencing in almost all retailing today is the shifting from a manual accounting and inventory to mechanical. This involves people in computerization and mechanization. We have an ongoing program with the junior college on midmanagement which is excellent. One thing of most importance to us in retailing is to have people who can sell and have sales training background. We do it of course within our organization. We have a very fine program but it would be most helpful if we had people coming to us, say from the junior college that had this kind of training: courses on sales and sales management. We compare ourselves, here in Kansas City anyway, to a barrel of barracuda - you have got to keep moving or you will get bitten - so you have to have people who are really expertise in selling. College graduates come out of college without a marketable skill and have to go back into a company to learn something in order to make use of what they learned in 4 years. I think junior colleges could respond and provide that skill as far as enabling a person to go out and immediately applying their skill. But in our own specific business, we are opening two new stores in the next couple of years and each store needs about 50 to 75 what we call first-line or midmanagement people. We promote these from within, but we look at them with sales first and see where we are with those kind of personnel we can move upward into these kind of management jobs. If they could come to us from a two year program and a sales background it would help.

16. Milgram Food Stores

Milgram Food Stores has one area that is a particularly acute problem and that is our dairy-route salesmen. We actually have routes but we don't have people to put on. We can't find people to operate these routes. We have probably between 50 and 70 retail routes throughout the area and these people need sales background because part of their pay is based on their initiative to build a route. Secondly, they need some basic bookkeeping and business math and I don't know what, but they do have to keep their records. As far as the people in our retail stores, our cashiers and these kinds of people, we have a training school we opened about 6 months ago. We are training all these people at the school and retraining those that are on the job. We take high school graduates, people who are working towards management. The needs for management are skills in communications, human relations, those kinds of courses. We find them very helpful. We are developing some of those ourselves, but we need supportive help on that too. We as a company will pay the tuition for these types of courses and we have several people on this program. Another area that is critical with us is maintenance, but not the journeyman.

17. Hallmark Cards, Inc.

Hallmark has hired many graduates of the junior college and the bulk of our hiring comes from the colleges in the area. But more and more we are saying, I think, that junior college graduates have gone on to four year colleges. In creative design the supply is very heavy with the exception of technical design like graphic arts. Most of our graphic arts people are not college graduates, but high school people who have specialized.

18. Motor Car Dealers Association

I work for the automobile dealers and presently Longview is doing a good job of training mechanics. I wonder if it is possible for you to design maybe a one-semester course, a pretty general one to cover such things as ability to communicate, regard for others, courtesy, logical thinking, being a self-starter, gratitude and any other subjects that pertain to getting along with people. These things seem to be lacking in the young people.

19. Business Men's Assurance Company

Speaking for the insurance industry at BMA we support a lot of clerical people. We are a paper factory, and we need an accumulation of secretarial science graduates etc. And we continue to need people with a general math background. How you generate good clerical skills I'm not sure. I have participated in some of these sessions for a good many years and each time we come up with this secretarial need, and some of the things we have mentioned here. I don't want to put total responsibility on the educational system because some of these things are taught elsewhere other than the educational system. We have to be alert too as to how we present some things to our applicants. We do use a lot of key-punch operators, and computer operators but we do a lot of promotion from within so this is a bit frustrating to some of the fine graduates who make application.

Manpower Needs Discussed by Executives in the Second Meeting

1. Ray Smith Ford, Inc.

I am with a dealer who currently has seventy-five to eighty employees in all departments. We are in the business of selling and servicing new Ford automobiles. In all departments, especially in the Service Department, we can no longer meet the demands for technically trained help. I have received four people in the past two or three years. I hope to see the program for automotive technicians go forward on a larger scale than in the past. It is not only the automotive service technicians we need, but we need salesmen and parts people too. We can't get these people from the high school, and we're going to have to depend on the colleges for these people. We want more than just a mechanic. We no longer can use just a garage-shop mechanic; he no longer fits in with the modern automobile. It's too sophisticated. With our training that is given by the manufacturer, we ourselves cannot keep up. So, we really need people who know how to learn. We've been in this business for some time and I think we've become stagnant. With all our new equipment and pollution control we need highly-trained personnel -- technicians.

2. Environmental Protection Agency

Our agency has a very big need for technical type people. It is very easy for us to hire an engineer graduating from college. This college has a waste power treatment program going on. This is good to teach an individual how to operate a waste power treatment plant. We need people skilled so they can go to major corporations and look at the treatment they're giving to their waste material. We need people who can go out and get samples out of the Blue River, come back to our central lab and possibly do just minor investigation and find out what is in this water. It's hard to get an engineer at a pay scale that we want to pay him. We need them specifically for new clients.

We have a specific need for technical people in the engineering field, the biology field, and the chemistry field: the person who knows how to do this stuff and has some knowledge of how to do it. We have enough doctors in our laboratory that they can oversee the students. I myself am interested in the minority aspect. I am interested in Mexican-Americans and Blacks. And needs right now are for this type of individual.

At the present time we fill these kinds of positions by calling Columbia, Missouri, Rolla, Missouri, etc., and ask people who are having financial difficulties making it through school if they would like to come up here and work for us and possibly go to night school at UMKC. This is where we have had to go to get some of our people--where they might be in engineering or biology--those who financially can't make it; so to them it is kind of a burden, but for us it's good. We use the person for two or three years until they finish school and then we try to interest them in coming to work for our agency. But a lot of times they'll go to work for private industry. But we can use the person for a couple of years and this has been our main resource. Presently we're working with the University of Iowa, and we will be working with Rolla on the same type of a deal. Sometimes we use graduate students and let them do some of our sampling around the area so they can make some money to go to school.

Most of these people in their past training have not had work which focused in this particular area so they have to spend some time making an application of what information they do have to our needs.

3. Crown Center Hotel

We have a 750-room property here that we are presently trying to staff. We have approximately a thousand jobs, broken down into about 200 job categories of which about thirty percent fall into the labor categories addressed here. We are new in this community, and we are very happy to find out that Penn Valley offers courses in Hotel-Restaurant Management. We have talked to several of their candidates with respect to employment after their courses and of part-time employment while attending these courses. We tend to capitalize on that labor source.

We are particularly concerned not only from the standpoint of opportunity for the Crown Center Hotel, but we are very concerned with the problems associated with getting manpower for our other hotels. We expect our needs to double within three years. With respect to the types of jobs within the hotels, we have a number of supervisory jobs that require education beyond the high school level but not necessarily education to the point of a bachelor's degree.

Historically, it has been the practice among hotels generally to start people in at a lower level and let them work themselves through all the operations up to a supervisory position. However, in the last three to four years there has been a tendency for Western International Hotels to get away from this practice by placing reliance on background and experience. If we feel that employees can handle a supervisory job and they have training for that position, they wouldn't necessarily have to work as a steward or dishwasher to gain a supervisory position.

Right now the availability of qualified employees to work in food service preparation is very poor. I can assure you that our particular chef is a little nervous. We have not found the particular caliber of cooks and chefs in this area, and we have had to recruit help from places like St. Louis, Chicago and New York simply because the help's not here.

4. Butler Manufacturing Company

We have been here for a considerable length of time and are interested in finding people with our own types of training procedures. We are looking for people with an associate of arts degree and less to get into structural drafting and structural technician work. We are probably one of the more significant employers in Kansas City in structurally-oriented professional and semiprofessional level engineers.

We are specifically interested in the people who might offer opportunities for development on our behalf in the entire office services area whether that be accounting, clerical, or whatever specific nomenclature one might want to add to it--or secretarial. We have a very strong in-system promotion policy which mitigates against hiring a person from the outside to a higher level position. We want to find those sorts of people who not only willingly come in at the entry level spot, but who also are then capable of building upon some degree of educational expertise to become an accounting clerk II as the case may be and earn $600-$700 per month short of being, shall I say, an auditor or a full senior auditor, or something like that where we're specifically interested in getting degree people in those jobs. We're finding, quite frankly, a comparative dearth of people in those areas and we're taking people with just a high school education which is less desirable than what we'd like in terms of getting these people to grow beyond just the one job so that they could move into others. Therefore, the junior colleges offer, in our estimation, a tremendous opportunity to begin to fill that void.

At Penn Valley Junior College we've begun to start an experiment with the drafting technology group so that we can make people familiar with some of our drafting work and with the way we do things. And that is why we are interested in people who have good educational orientation to something because we find, quite frankly, in our business, the first thing we try to get people to understand is the Butler way of being a technologist or a technician or a draftsman or a secretary or an accountant. So we're most generally interested that people get more exposure say in the accounting or clerical or technician's level in junior college than they would have had in high school, but we're really not interested in getting engineers as we can ill afford to pay that price. So it would be a very interesting opportunity and I would say bless the junior colleges if you can do it, because there is a tremendous void here.

We have a system of on-the-job up-grading internally now, where we specifically are oriented towards that sort of upgrading both inside and outside. We have a hundred percent tuition reimbursement program where absolutely any course that any person takes that, in the strictest interpretation, if its job-related or in the future necessarily might apply to any job the person might do, we'll pay for it. My own orientation is, I don't care what course anybody takes as long as we are all in the educational environment. I don't see but what it can be a benefit. But if, in fact, we have an individual who is in drafting and wishes to take some courses in data processing or programming, which is in the office services area, in my estimation, then we'll pay for it. Internally, we have a specific set of developmental programs that are determined by the individual and his supervisor with counseling by the personnel department, so as to prepare a person in their own career-growth expectations, so that they might be able to achieve those. But our ability to do that are directly predicated on the quality of person you are working for and the sort of initiatives and "go-gettum" that that person's got. It is difficult to take a technician who's happy being a junior engineering technician and turn him into an engineering technician, let alone a senior engineering technician if he doesn't want to pay the price.

5. Joseph J. Oshivon, Architecture

I'm representing the architects in the area. The chapter here, which reflects what is happening nationally, is anxious to have a way of coordinating all the educational efforts by all of the schools that affect the Kansas City area. For a number of years now there has been an effort made by our chapter to bring it to a level of the schools that influence the area, particularly the University of Kansas, Kansas State University, UMKC, junior colleges, and even so far as to stretch across the state to Columbia and so forth. We've made some progress with the University of Kansas and Kansas State University which is the level the architecture to which the profession orients itself. The profession in general has faced a problem for the past ten or fifteen years that they're broadening their requirements within their profession itself. They're not just practicing architecture, they're involved in a variety of requirements, not just in the related terms of the professions like landscape architecture, and interior design, but to the urban problems and to the environmental problems. And when the junior college starts to get into this we find that so far what they have tried to do and, as you will see in the catalogue that the junior college puts out, they're referring to architecture, the environmental arts, architectural technology as needing two-year preparation for the students to go further into a school that gives him the chance to become a complete architect or some related level of that sort. Now I think what you're after here, is something that's less than that, something that would help the architect, and therefore help the community itself. I wish I could get up on behalf of the architects in the community and be able to list manpower needs: I think it's just almost impossible. I don't think you can get any architect or any architectural firm that is capable of stating those needs. What I do think can happen is that the curriculum that can be developed by the junior college can perhaps focus in on the needs of the architect and also the other technological needs of related work. I had a meeting with the assistant dean from Longview recently where we came out with a suggestion that there be a meeting held which would allow representation not only just from architectural firms but also from engineering firms, manufacturer's representatives, representatives of contractor's associations, and representatives from the universities like Kansas University and Kansas State University which allow a common discussion on where the junior college curriculum can fit.

Many architects do not take the time to speak with the representatives of manufacturers. The reason--other than the usual that I'm just too busy--is that maybe the representative isn't up to talking about his product the way the architect wants to talk to him. This is not always the case; there are many representatives who are well educated for their work, and I think in a way that this is an area technologically that can be prepared for through the junior college. I just picked one; I'm sure when you get into drafting requirements that there probably can be some areas where the junior college can feed the architectural profession as well as the engineering profession in this area. The engineers have made more use of a variety of personnel from junior college levels than the architect. The architect still looks for a man who's a graduate of an architectural school who thinks that someday he can become the chief designer even though he's going to be hired to do a very menial job to begin with. I think that has to change; the profession itself is changing; the curriculums of the larger schools are changing; they're utilizing all kinds of disciplines that are not strictly architure but related. I believe that the junior college has to have an in-depth kind of meeting with a variety of sources to come out with the kind of answer I hope you're asking for in this meeting.

Unlike the profession of engineering where the middle level technician communicates between the professional on one hand and the craftsman on the other hand. We see a need for communicating among several kinds of professional areas, as well maybe as communication between the professional and the technical level workers. We realize that the architect is still interviewing the applicant as if he is going to be a chief designer, even though he's going to run errands. And this is what has to end.

6. Black and Veach, Consulting Engineers

We are all very much aware of the shortage of technicians and engineering technologists. Currently in our own firm we've undertaken a program of training draftsmen because there are not enough available to fulfill the number of positions. This is not necessarily a very efficient way to go about it, it just happens to be the quickest and only way we see to do the job right now. If the community colleges were to provide us with additional draftsmen, we would happily surrender our training program to them.

I would not want to indicate there is not a continuing need for engineers--there definitely is. There will be an extreme shortage of engineers down the road. We've heard a lot about the aerospace lay-off and engineers that are out of work. There is a desperate crisis for engineering manpower in the electric power industry. It's also true to a large extent of the environmental industry, and this problem will compound itself. I would not want my remarks to be interpreted as trying to discourage young men from going into engineering and settling for something less; however, there are many young people who can find an excellent career in technical work with more than high school but less than a bachelor's degree. There is a crying need for them.

There seems to be a general shortage of people who can come into an office and work effectively. They do not understand office systems; they do not understand communication; they have not learned, for some reason, to take directions and work together. This is not limited to technicians I don't think. I see it among our clerical help and all of our administrative people. This is an area in which I think we could well improve our educational processes. One of the most important factors facing my profession in business is of continuing education and I see this as an accelerating problem--certainly not a diminishing one. All of us in technical offices are scrambling constantly, trying to keep up with the growth of technology, new processes such as data processing, computers, and new office procedures, and we seem to be constantly losing the battle. This will continue, and I will hope to be able to look to our community colleges to provide programs, not necessarily formal classroom programs, perhaps inplant programs--some means to be able to upgrade our personnel. We currently employ mostly civil engineers but also a high number of mechanical, electrical, and some nuclear and chemical engineers.

There are shortages not just in electrical engineering but also in the electrical power industry including nuclear, electrical, and civil: virtually all fields!

7. Shafer, Kline and Warren Engineers

We have a need for both engineers and sub-professional people. Traditionally most of the courses that have been offered in junior colleges--both drafting and technical courses--for instance, drafting, you asked the student to learn how to draw pins and gears and this type of thing, and, really, that type of thing is really not applicable to our business. We are looking for people who perhaps have a little understanding about waste, sanitary waste and the treatment of it and how you would go about producing a drawing for instance that a contractor can use as opposed to a manufacturer. So we are looking for people who have a smattering of a number of things. We try to find these people from the ranks of the students who are some day going to become engineers. We try to help those people, and in this way we try to perpetuate the profession, which is good and I don't want to see it killed. However, to quote some statistics from a magazine put out by the Kansas City Chamber of Commerce, in terms of dollars billed Kansas City ranked fourth in the nation as far as consultant engineers are concerned. So, I think we must be recognized at least by the local junior college and maybe your program could be tailored a little more for the man who may not make it to the level of the graduate engineer but would be a technician and happy at that level of work. It is something I think is much needed in our profession today.

8. Rosehill Gardens, Inc.

At the present time, the nursery industry is broken down into several fields. We are involved with wholesale growing of plant material as well as growing for the retail outlet. There is a need for landscape architects or designers. We are involved in nursery production or nursery management. We are involved with the maintenance or service aspect and this involves residential and commercial accounts. At the present time, the nursery industry must rely on basically an in-house schooling program to teach employees the basics of horticulture. We in Kansas City can draw people from several of the universities who have B.S. degrees. However, our biggest need for manpower lies in something less than a B.S. degree. We need people who can run equipment with a little responsibility. We need people who are involved with the public every day in selling, but yet they may be confined to a nursery or outlying growing area. We have a need for foremen and superintendents--foremen of landscape crews and superintendents of a nursery. We have a definite need for garden store managers for retail outlets. At the present time the nursery industry is a fluctuating employer; we work at different seasons of the year. We employ about sixty people but later we will be up to around a hundred and ten, and this is pretty general in the nursery industry over the United States. Our manpower at the present time is mostly coming from Mexican Americans, and they are very transient. We cannot keep a full work force. This is the first year we have succeeded in keeping foremen full-time throughout the year. At present, we have nine foremen; generally it has dropped down to five or less and we are always caught short at this time of year. We would like to see the junior college take some role in helping us educate people to be employed as nursery foremen, nursery superintendents, and general nursery laborers, rather than having to rely on somebody who walks in the office and you never know whether they're going to show up for work or not.

We could make use of a two-year trained ornamentel horticulturist. At the present time we must rely on the University of Missouri; however, there is a training program in St. Louis with which you may be familiar. This program seems to be well run and well oriented; however, many people who trained in a suburb such as St. Louis prefer to remain basically in that location. We must also consider that there are also quite a few landscape firms or nurseries on the Kansas side which would be drawing from our metropolitan area. At the present time the nursery industry is not large in Missouri, although they have a gross volume of around twenty-three million dollars. We're constantly growing; and the nursery industry has grown. It has never regressed; we have always increased.

I think probably we will be in a position sometime to where the need for a soils or fertilizer specialist would be a more technical problem. As soon as the laws are set concerning spray programs, for instance, we are going to have to hire somebody with some education to simply run a spray truck which could have been done by an uneducated person before.

At the present time rather then highly trained specialists we would prefer a more broadly educated person who has a little bit of this and a little bit of that and who knows a little bit about ornamental horticulture, a little about soils, etc.

9. United Telecommunications, Inc.

United Telecommunications is a system of telephone operations throughout the United States. Our needs are probably wider outside the Kansas City area than inside because we have just a small operation here. Traditionally, the telephone companies have grown their own because there have been no schools that have trained telephone engineers or technicians. There are a few starts in that direction now, but primarily we have brought people up through the ranks. We have to teach our electrical engineers and our electronic engineers. So we have a definite need for people who have background training in the telephone industry. We have a wide need for the middle area that you're speaking about. Today we have to get them from the people in the craft who are better, perhaps, than some of the others. We raise them up; we put them in some of the engineering departments; we put them in supervisory and so on. So there is a great need for this kind of training and a two-year school would satisfy a lot of our needs.

Certain kinds of people we would rather have trained outside our schools. We have people from these schools. There are not many people coming out and there are not many schools. Texas A&M has a school to which we send our people. This is an on-going thing; not a degree thing, and we send them for two to three weeks to learn to be an installer, a lineman, or something, but this is the lower, the craft level. We are talking about the middle level--the fellow who is a technician and who can sit in the office and determine if he should put one kind of cable or another on an extension, and so forth.

10. R. H. Macy Company

As our Missouri-Kansas Division is projecting four new stores within the next five years, this will create, I will estimate, between five and six hundred jobs, both full and part-time. Retailing is more or less a carniverous business; it seems to chew people up rather quickly.

Our biggest problem, as I believe other people have expressed now, is to find someone with less than the college degree to act as a supervisor, primarily with people, to a lesser degree in materials handling, receiving and marking of merchandise. and clerical and office experience. Our business operates on a very low profit margin. So needless to say, we have to utilize as best we can people that we can bring into the business at, very frankly, a slightly lower salary than we would have to pay the college graduate. We do have a training program and an executive training program for these people. We actively recruit on many of the campuses throughout this part of the country. But we still need that middle-line hard core individual who has enough integrity and enough gumption to stick to something. And as a result, they will move up in the business, they will become successful in the business.

Some of the people we have gotten from the junior college program have proven very good, very capable people for us. And looking to the future, there is a definite need for this middle-line person who perhaps may be a little bit older than what you would normally consider the college graduate, who wants a job, who is capable of performing but, perhaps, doesn't really have the desire to be a store manager or an operations manager for a store. This is the type of person that we do need, that we can rely on to be there, to manage people. and to manage departments, and to carry on for us.

Our experiences in these situations are typical of retailing and large department stores in general. Basically we all operate in pretty much the same manner, whether it be a Venture store, a Jone's store, Macy's. whatever it may be. We have a fifty percent tuition assistance for our employees to get job upgrading work.

11. John Holman, Dental Arts Laboratory

I'll take a crack at a small portion of the health care field. After listening to these men with a thousand employees and engineers, car mechanics and so on, I'll try to first put the dental laboratory industry in the perspective with this. A few years ago I heard the statistic that of all the plastic production and acrylic resins in the country, the dental industry as a whole uses less than two percent. What this means is that if a dental manufacturer goes to DuPont or Roman Haus and says, "Hey, we need some research help," they say, "Well, go jump in the lake. We don't want you; you're too small." The largest dental laboratory in Kansas City right now has approximately forty technicians. About two and a half years ago when this laboratory was acquired by a large conglomerate operation, a hospital supply company, it employed approximately eighty technicians. An then, I am supposed to be here telling you how many technicians we need.

There is not really a high turnover rate in this area. A good technician is employable immediately. About two years ago, members of the National Laboratory Association were polled as to job requirements and this is, I think, approximately twenty-five percent of the industry as a whole represented by the organization. They said that they could immediately employ 3,600 technicians. That same year, from all the educational programs nationwide, there were 150 technicians graduated. In approximately the last ten years, because of improvements in dental equipment and procedures, there has already been a 400-500 percent increase in overall billings by the dental laboratory industry. If the government programs, dental health insurance programs, and so on come along, the expectations are that the need for dental appliances are just going to explode. That is why we are here. We had hoped that the conglomerates coming in would furnish some standardization and some training programs within the chains of dental laboratories that they have built. But it has just not happened; everything has gone backwards, it seems, in those acquisitions.

Another acquisition here in town just closed out the fixed crown and bridge department about a week ago that should be the growing department. They've closed it out entirely here in Kansas City. Why, I don't begin to know. At this time, for all practical purposes, there is no education being done. It is a second-generation industry.

The Mid-West Association Dental Laboratories, which I represent, and which has worked with the program here at the junior college is celebrating its fortieth anniversary. We are the oldest association in the country. So this is essentially a second-generation industry; if you use the term "mom" and "pop" stores, this would sum it up pretty well. Except that now we are being forced to expand.

The laboratories themselves have not supplied the training that they should have supplied, principally because they are just not big enough. So we desperately need the training. There are three ways to go. (1) The large laboratories want a metal polisher, a plastic polisher, a wax pattern maker, a tooth set-up man; they want somebody who can do a specific job, so there is a need for this type of training. (2) I strongly feel there is a need for the associate degree type of man with academic training as well; someone who knows the relation between the various areas: denture, removal, fixed and ceramics. Because, in many instances, all four areas may be involved in one patient's mouth. We need that type of man, I am convinced. (3) We need continuing education programs for job upgrading. The only education in this field is done by various manufacturers. Laboratories spend considerable sums of money sending their people to New York, San Francisco, or Los Angeles to get this training and would be so happy to be able to do it right here locally. The area is very large that could come into Kansas City.

The National Association is also working towards a licensing program for dental technicians, a certification program. They hope that within a few years a technician will have to have a license. There is a continuing education requirement for certified dental technicians. I believe it is fifteen hours of class work right now. So that's actually four areas.

As to whether the outlet for people trained here would be to go elsewhere in the country rather than to be absorbed in the Kansas City area, I really don't have the answer. There has been a tremendous loss of employees in the large laboratories and, on the other hand, the smaller two and three and five men operations have been growing. Many new operations are coming into existence, particularly from dissatisfied members of larger operations. Like I say, a man today who can produce has no problem finding employment. He is desperately wanted and needed. What is going on in the other parts of the country, I don't really know. But a man who has the skills can find the work, there's no question about that.

12. Clay County Medical Association

The doctors in Clay County have a problem in finding two specific types of people. One is the receptionist-secretary type who is well-versed in medical terminology. They need persons who can come in the office and will not have to learn a new vocabulary before they can function. Doctors would like to see a training program with emphasis placed on filling out insurance papers. The problem in doctors' offices now is the need for someone who can understand what the questions are calling for. If a course could be worked out to each a person the various forms, this would be good, not only for college students, but perhaps an extra training program for people who might already qualify except for this type of thing in a doctor's office.

The other person they look for and cannot find is a medical assistant. This is a job largely filled by RN's now, but the RN's are not always available. The doctors would like to see medical assistants trained with a broader background than the RN, but perhaps not so much depth: training with emphasis on lab work, x-ray equipment, blood count, and urinalysis. Here again, have these people also qualified to fill out the insurance forms. They sometimes use students from Kansas City medical assistance schools, but they find these students still don't have the broader education that is needed to walk in and handle the equipment.

I'm not familiar with needs for para-medical personnel in hospitals but only with individual doctors. The Department of Health, Education, and Welfare has a very good program where they are trying to get para-medicals, guys that are military people that have worked, say, in Viet Nam, in the hospitals, sort of the technical type of work. There is a major program called Uplift where these individuals out of the service might be able to work for a doctor somewhere. I know from some of the meetings I have attended where everybody is trying to find people to fill jobs that Health, Education, and Welfare has placed much emphasis on this one program: finding somebody who has had some education and some schooling in basic medical type of work.

13. Parkview Gem, Inc.

I don't do much hiring at store level, so mainly I'll be directing my attention to the type of employees that we would employ at the headquarters office. I was interested in some of the comments that were made about advertising and graphic arts because we do have a print shop, and I have had some difficulty in locating help, and that does seem to be a problem, but I have been able to fill these needs with perhaps veterans that have learned something about it in the service, or a person who has been through the MDTA training. I think that is an area that could be expanded.

As far as the management training at the store level, I'll cover that briefly. We need sales people, and this is an excellent area to give a person some practical experience who is going toward the marketing degree or who would like to get into management. The person who comes out of college with no work experience behind him has to learn from the group up, even though he has a degree. These are retail sales people in the department store.

We do have management training programs. We do like to move our people up to management positions wherever possible. This is why I think a co-operative type of education program could be promoted here. I don't know if you've thought about that or not: trying to coordinate schooling and retail sales. We are co-operating with a couple of junior colleges in other areas. The resident center at Independence has a secretarial program and an accounting program -- one year and two year programs, and we have placed students at our headquarters office in accounting-type positions and in secretarial-type positions: not really secretarial, but shooting in that direction -- clerk typists and this sort of thing. This has given them the benefit of some experience while they were studying.

The other cooperative program is with Rockhurst. In their program a student will work for six months and then go back to school for six months. They have two students to fill one position and we are very pleased with our progress in that area so far. This might overcome one problem. I asked my boss what he would like for me to bring to the meeting and he said, "Well, if you can soften the impact of a student coming out of school, expecting that he's going to be welcomed with open arms and a big salary, it's worth mentioning." And it really is a problem to us; we cannot offer the salaries that they would like to have and train them at the same time. This is why I stress the co-operative aspect of it.

We do not have an educational assistance program for employees who want to upgrade job skills on a part-time basis, but we are very eager to work with co-operative assistance programs. We work with the various high schools also in this area and employ their COE students.

I've tested a good number of keypunch operators from Penn Valley, and I think I hired one. They seemed to fall apart when they sat down at the machine. Now I'm sure they didn't do that at school. I would stress that they have to spend more time at the machine so that they're at least skilled and feel at ease with it so that when they go out on an interview they don't come apart at the seams. We operate a rather pressure shop and I didn't feel that a person who couldn't pass the test would have a fair chance in our shop. I really think that it was because they didn't spend enough time at the machine. In questioning students about it, they indicated that they didn't have to spend any time outside of class. The success that I have had has been with one or two of the trade schools where this is the only target they are shooting for is keypunch, and they spend all day in school studying that and practicing. And I'd like to say along that line, that in talking with the data processing manager, there is a great trend toward OCR, so that the data entry person may be something other than keypunch three or four or five years from now. They are looking to optical scan and this is going to be a very on-going thing. The criteria there would be the typing skill and a very short technical training on how to operate the OCR.

I asked programming, what would be, in his estimation, the language that would be the most prominent, and he said cobalt; the A&C. This is what we have been using for about three or four years. I even took that data processing course at Longview to see what it was like because this was a very heavy area for me for the last two years. I discovered that it was very much slanted towards programming -- nothing in it about operations. This is where you really have to devote the time. We need people who can move into the divisions desperately, in the area of operations.

Logic and decision-making are skills which I feel certainly should be stressed in any program. And I might say also that data processing should be an introductory course to using data processing for whatever area the user might need it, from whatever source the information might be coming. We need people to think in terms of systems design from a systems standpoint, whether it's accounts payable or credit or whatever. The machine can only do what you ask it to do and if the user department is not to some degree oriented, there are problems. I know that we have put a lot of money down the drain on reports that just weren't what we needed.

14. Yellow Freight System, Inc.

I would like to speak *about* the motor carrier industry, but not *for* the motor carrier industry. I would place a greater degree of desirability on a course in willingness to work than I would on logic or decision making. I sound a little facetious, but I think there is a lot that can be done there, in that field. Because if we've encountered any difficulty with kids coming out of school, it's with this particular item, when they discover that it's necessary to do something. The motor carrier industry is, I think, a little more unique than any of the others that we've talked about in that we cover so many facets of business. I'd like to break it down into two particular ones. One is more unionized, or is still unionized, that's the road drivers, the city drivers, the dockmen, and most of our shops. And when I speak to high school students about the future of the motor carrier industry, I immediately get a reaction from the boys. To the boys these are the kind of glamorous jobs (and you will be happy to know that we now have some women in these jobs) driving these enormous rigs over the highway and doing a very nice job. There are many, many other opportunities in the motor carrier industry, in the field of clerical work, supervisory positions, and positions that call for not quite supervisory ability or demand, but nearly so. We have such jobs as road dispatchers, city dispatchers, and people in charge of claims. We have an excellent field in rate making and for rate clerks. These are high salaried positions in the industry as a whole, and Kansas City has been unable to fill all of the positions they need, especially in rate clerks.

City supervisors and city dispatchers are jobs that you must be trained on-the-job to do. Road dispatchers can be trained other than on the job. I think on our dock we have something like forty or fifty dock foremen with various degrees of supervisory people in between the dock foremen and branch manager. We have people in charge of claims, in charge of over-short and damages, and in charge of cashiering work. These normally demand a high school education. They do not all demand, but for the most part they do, a higher degree of ability than is normally accumulated by the time a student leaves high school. I think there's a very great opportunity to co-ordinate our efforts between what we need in the motor carrier industry and the junior colleges. As to the union side, this was the glamorous side of the trucking business -- the one that is probably the most renumerative. We've been able to adequately fill all the positions of road drivers. But, in the future as I look at all our road drivers, many of them are getting up towards retirement age. I think that in the future there will be a place for young men coming into the field of driving and similarly with our city drivers. We have continual turnover in dock people; it's nothing more than common labor to a certain extent with some degree of knowledge of freight handling and bill marking and so on. Basically they'll be able to count, so there is some place for junior college students there if they have no desire to go any further. Frankly the jobs are well paid and there is nothing at all of which to be ashamed.

I think a little further down the road it might be quite possible that the motor carrier industry would have need for logistical technicians. There is a school now conducted at UMKC in the evenings, a traffic school, that offers various courses and leads to a certificate in traffic, which covers a number of these. I still think that there is some work that can be done in this area, too.

To a certain extent work in scheduling movements and materials is making use of computer at the present time. We move all of our trailers now by computer, not exactly by computer per se, but we keep track of them by computer and that's necessary because of the enormous number and pieces of equipment that we have on the road today. There will be some jobs available in the computer area because we've just begun to computerize the motor freight industry. There have been some experiments done that unfortunately have not worked out as far as using computers in loading and unloading freight. They are continuing to work on that, and I think it will be effective one of these days. I see this as a future development in this area of business.

Summary of Discussions

Demand for a number of specific programs was mentioned by executives participating in the study. Each has been included in the summary section of Chapter I. The major points gleaned from the discussions are presented below.

1. The education and training of top drawer secretaries and stenographers should be a high order of business of MJCD.

2. There seems to be a big demand for able people with mid-management competencies in business--accounting, business data programming, sales and sales management, finance and credit, wholesaling and retailing, insurance and real estate.

3. According to the hospital representatives, there's a big job ahead in the preparation of paraprofessionals and technicians for the allied health field.

4. There was more than a little interest in engineering and science technicians of several kinds--electrical/electronics, chemical, mechanical, air conditioning/heating, architectural, etc. Several speakers emphasized the importance of solid preparation in physics, chemistry, and mathematics. Advice was given that this preparation should be, "Not too highly specialized."

5. Mechanics were needed in several fields--auto service for one thing.

6. The machine trades and construction trades did not get much mention. These are highly unionized operations, and the big companies often run their own programs jointly with the unions.

7. There were strong and frequent references to the need for better general education--"the ability to communicate, to use logic, to be sensitive to people, and to make some reasonable use of mathematics."

8. Drafting and design personnel seem to be in fairly good demand, but they ought to combine their drafting talent with either construction industry knowledge (architectural drafting), or mechanical technology (mechanical design).

9. Operating engineers (for building mechanical systems); heavy equipment operators; and over-the-road heavy truck drivers were all mentioned as being needed.

Part II - Manpower Needs Identified From Other Local Sources

Introduction

In this section are presented some manpower requirements identified by the Regional Office of the Civil Service Commission. Also presented are demands for educational programs implied by the presence of private trade and vocational schools and institutes and offerings in public area vocational technical schools.

Major Manpower Needs of the Civil Service Commission[1]

Results of an annual manpower survey of manpower needs in agencies of the regional Civil Service Commission revealed greatest need in the following types of jobs in order of number needed. They were:

General Clerical & Administrative
Clerk Stenographer & Reporter
Tax Examiner Series
Air Traffic Control Series
Correctional Officer
Secretary
Card Punch Operation Series
Police Series
Social Insurance Administration
Nursing Assistant Series
Sales Store Clerical Series
Accounting Series
Food & Drug Inspection Series
Computer Specialist Series

Private Trade and Vocational Schools

One of the clues as to need for educational programs in public institutions may be obtained from an examination of occupational training and/or educational programs available for youth and adults in private schools and institutes. Costs of attending private trade and vocational schools vary from several hundred to several thousand dollars. Often the cost of attending profit making educational institutions prohibits some residents from taking advantage of the programs. More often than not such schools thrive by meeting an educational demand which is really there in the sense that people are willing to pay substantial sums of money for the courses and which is often not recognized and met by the public system of education. In the Metropolitan Kansas City area most of these schools are concentrated in the core city. Although there is no good single directory of private trade and vocational schools we have identified from several sources over 80 schools in Kansas City, Missouri.[2]

---

[1] Kansas City Area Office, United States Civil Service Commission, February 1, 1973.

[2] State Department of Education, Missouri Veterans Education Directory, (Jefferson City: The Department, July, 1972), Metropolitan Planning Commission, A Decent Job at a Living Wage, Employment Action in the Kansas City Region, September, 1971; Missouri State Department of Education, Vocational-Technical Schools and Programs in Missouri, 1971; Southwestern Bell Telephone Company, Telephone Directory--Yellow Pages--Greater Kansas City.

The largest number of private trade and vocational schools offer programs in business (25), cosmetology (19) and technical occupations (39) with emphasis on auto and aviation mechanics, electricity and electronics, data processing, and health care para-medical occupations. There are specialized schools in bartending, locksmithing, auctioneering, fashion design, meat packing, modeling, watchmaking, theatre crafts, broadcasting, truck driving (5), and floral design. The major area in which the numbers of schools reflect demand that the community colleges are not either providing or developing programs is cosmetology. This is an area in which some public community colleges throughout the nation have developed programs.

Area Vocational Technical Schools

There are three public area vocational technical schools in the Metropolitan Junior College District or in proximity. No programs are offered at the post-secondary school level at present.

Courses now offered or planned for the near term are as follows:

- Agriculture
- Air Conditioning, Heating and Refrigeration
- Auto Body
- Auto Body and Fender Repair
- Auto Mechanics (2)
- Aviation Technology
- Carpentry
- Clerical and Secretarial
- Cosmetology
- Data Processing I
- Diesel, Industrial and Agricultural Equipment Mechanics
- Distributive Education (2)
- Drafting (2)
- Drafting, Technical and Architectural
- Electronics
- Food Service, Cooperative
- Graphic Arts (2)
- Heating and Refrigeration
- Health Services, Orientation
- Health Services (Nurses Aide)
- Keypunch and Machine Operator
- Machine Shop
- Merchandising, Sales, and Advertising
- Office Practice, General
- Radio and TV Repair
- Secretarial Office Practice
- Specialties in Business Education
- Survey of Vocational - Technical Studies
- Vocational Work Study
- Welding (2)

Where more than one program is offered, the number is shown in parentheses. The significance of this inventory for Community College program development is two-fold. First, in some areas where there is an absence of secondary school level occupational education to prepare youth or adults for job entry into those occupations for which a high school level of education is adequate, community colleges have typically offered an array of programs to fill the void. Secondly, in areas where there are secondary school level occupational programs extant or developing, there is need for program articulation between them and the higher level technical and semi-professional programs provided by the community colleges serving the area.

Part III - Opinions About Metropolitan Junior College District Operation

Introduction

For the purposes of identifying opinions about restraints on Metropolitan Junior College District program and facilities development which were not anticipated in 1968, staff of Arthur D. Little, Inc. interviewed twenty-five persons. Each of the six Board of Trustee members identified one district resident believed to be influential and knowledgeable about Metropolitan Junior College District development. In addition to interviewing each Board of Trustee member, the six individuals identified by them, and selected members of the District Administration staff, eight additional persons were identified for interview by Arthur D. Little, Inc. staff through referral as key people in positions of leadership and with responsibilities for planning. A structured interview guide was prepared for use by the interviewer for the purpose of seeking and recording opinions of all persons contacted to similar questions. A digest of the results are presented here.

General Impressions

All persons interviewed from both the Black and White community expressed a considerable sense of confidence in the future of Kansas City, Missouri. This revealed itself in such statements as, "Kansas City will be one of the great metropolitan areas of the country. Kansas City is at the cross-roads of the country; it has a great future, etc."

Of the people interviewed, there did not appear to be any relationship between their home location and observations about the junior college system. There was less parochial concern with the individual colleges and more concern about the system as a whole. One of the objectives of the junior college system mentioned by most interviewees is to maintain a balanced, integrated system both in terms of curriculum and student composition. People seem anxious to support activities which would not result in a coalescing of groups. They are anxious to avoid the coalescing along ethnic or racial lines.

Students

Respondents were asked what kinds of people they thought were enrolled at MJCD and if they felt as many youth and adults had enrolled as might be expected. The general consensus among interviewees was that most enrollees are young high school graduates who either could not afford to go anywhere else to school and/or were not admitted to any other school. Adult participation is conceived to be lagging somewhat, especially at Penn Valley College. This opinion could result from a lack of or weaker communication links with the older more settled community residents. It was said by some respondents that the suburban area residents are more community involved and are more aware of what their local junior colleges can offer than are those in the inner city. This involvement in the suburban area was thought to be due to greater communication among students, school administrators, and adults in the community. In the center city some believed there is a need for greater communication between college administrators, residents, and students. This need has been recognized and attempts now are being made to have a greater local community involvement. But over and above the local communities, respondents felt the junior college system must project itself as representing the total Kansas City metropolitan area if it is to avoid eventual truncation of the system.

Programs

Persons interviewed were asked what they considered to be the most outstanding features of the Metropolitan Junior College District development over the past five years, how well programs and services developed at each college had fit the needs and interests of youth and adults, and if the development of programs had been as successful as it should have been. All respondents gave their highest praise to the programs that the MJCD is providing to residents. The two reasons most often given were: (1) the programs on each campus are consistent with the needs of the work community, i.e., students gain skills that local industry needs, thus graduates can readily find jobs in their own community which utilize the training they have obtained; and (2) remedial programs are being provided which help realize the goal of MJCD to provide all residents with the opportunity of higher education.

Facilities

Most interviewees thought that community groups in the suburban area were utilizing college facilities to a greater extent than were inner-city residents. It was a general opinion that facilities have not been keeping up with demand in certain program areas. The most frequently mentioned program area was nursing and the inability to absorb more students from long waiting lists of applicants into the nursing program. Respondents expressed a great deal of concern that facility and program development decisions should not be made in isolation from the social implications of such actions. For example, all interviewees were aware of the immediate need to expand facilities for the nursing program. The question of where these facilities should be built, however, was not clear-cut in the minds of most people. Many felt strongly that all campuses should attempt to maintain a racial, ethnic balance, but thought that building duplicative facilities would undermine this goal. They pointed out that, if duplicate nursing training facilities were developed at a college located in a white suburban area, it would cater exclusively to the white suburban group leaving Penn Valley College to cope with the inner-city Black group. Moreover, respondents feared that by putting a nursing program at another college besides Penn Valley College, the pandora's box would be opened for pressure to put duplicating courses at Penn Valley College which are now at Maple Woods or Longview.

Respondents were asked where priorities should be placed on additional facilities now that the first new permanent facilities are nearly complete at Penn Valley College. Inquiry was made as to whether new college facilities should be constructed on one of the two suburban college campuses before construction is started on the other college campus or whether construction should be phased a little at a time simultaneously on each college campus so they develop at about the same time. Most persons interviewed had no definite opinion on this matter, but those who did have an opinion believed construction should proceed simultaneously and as soon as possible on permanent facilities at each of the suburban colleges. Reasons given included increasing maintenance costs, the danger of poor community images engendered by prolonged use of temporary facilities and lack of space to accommodate some instructional programs.

Factors Influencing Development of MJCD Colleges and Needed Improvements

The majority of the respondents voiced the opinion that ADL's efforts in helping to set up the blue-print for action were a major factor in influencing the development of MJCD. Similarly, most agreed that curriculum development is the most volatile factor to be considered in future planning.

Some persons indicated that they believed the junior college system had been top heavy with administrators and that even with expanded enrollments the ratio is too large.

Most respondents could not mention restraints unforeseen five years ago that have become important ones to consider in future planning, except a tightening economic situation. Several persons identified major restraints which have influenced development as (1) need for additional financial support, (2) lack of a district-wide systems approach to planning and a plan for curriculum development, and (3) lack of enough community involvement in planning, particularly concerning facilities and program development, so a higher level of public consciousness would exist about the value and performance of the junior college system and the meaning it has for the future.

Public Satisfaction and Support

Respondents were asked in general, how satisfied they thought citizens of the Kansas City Metropolitan area were with the development of MJCD colleges and whether they believed there was general public support for financing the District Junior Colleges. There was general agreement among those interviewed that the public, in general, has been quite satisfied with the development of MJCD colleges to date and as a result the chances for a bond issue being acceptable to the public is believed to have a better possibility for the junior colleges than for other purposes. Nevertheless, respondents expressed the necessity for informing the general public of the activities and accomplishments of the junior college system so that a bond issue would not be defeated because of misinformation and lack of knowledge. Many respondents expressed the opinion that the public would give stronger support for expansion of Penn Valley facilities than for expansion at the other college campuses. Two major reasons given were: (1) the public is more willing to accept the need for education of Blacks, and (2) the programs offered at Penn Valley, especially the nursing program, are in high demand both by potential students and by institutions who need to fill jobs.

It became evident from all the interviews that a wide variance of opinion existed among different persons as to the types of programs offered and persons served by the Metropolitan Junior College District. Some confusion seemed to exist in understanding about the functional differences between "community" and "junior" colleges. Some Black members of the community expressed the opinion that the Board of Trustees would need to adopt a more vigorous position and be more responsive to developing an affirmative action program, the implementation of which would bring into top level administration more Black professionals and administrators.

CHAPTER VII

A STUDY OF HIGH SCHOOL SENIORS

Introduction

The high school seniors in the Kansas City Metropolitan Junior College District are an important source of information in determining the need for additional post-secondary educational programs and the potential enrollment in such programs. Previous studies by Arthur D. Little, Inc. staff and published findings of other research studies indicate that, in general, graduating seniors have formulated occupational and educational aspirations, have a knowledge about their parents' educational attainment and financial condition, and have some definite opinions about the educational and counseling assistance which the high schools provide them.

In the late fall, 1972, the seniors in attendance at 22 high schools in the Metropolitan Junior College District (MJCD) responded to a questionnaire concerning their future educational plans, occupational aspirations, and factors relating to post-secondary school attendance. A total of 5,687 seniors (2,691 boys and 2,996 girls) responded. This was approximately 61 percent of the 9,249 seniors enrolled in all of the high schools in the MJCD. Absenteeism within the schools because of bad weather and illness resulted in the low level of response by seniors. Questionnaires designed to gather data from these seniors were delivered to each school along with a set of written instructions designed to standardize the administration procedures. The data were then keypunched and processed through the computer. The results are presented below.

Characteristics of Respondents

Of the 5,687 seniors responding 34 percent were enrolled in a general high school curriculum; 28 percent were in a college preparatory curriculum; 19 percent were in a commercial/business curriculum; and 6 percent were in a shop or industrial arts curriculum. Three percent were in homemaking; 0.5 percent were in agriculture; 7 percent indicated they were in some other curriculum; and over 3 percent did not respond. A third of the boys and 36 percent of the girls were in the general curriculum. Fourteen percent of the boys and 23 percent of the girls were in the commercial/business curriculum. Thirty-one percent of the boys and a fourth of the girls were in the college preparatory curriculum. Twenty-two percent of the boys and 16 percent of the girls were distributed among other curricula.

Forty percent of the seniors (36 percent boys and 44 percent girls) thought they were in the top third of their class; 51 percent (52 percent boys and 51 percent girls) thought they were in the middle third; and, 8 percent (12 percent boys and 4 percent girls) believed they were in the lower third. One percent did not respond to the question. Since 91 percent of the responding seniors perceived themselves to be in the upper two-thirds of their high school class, either they really were in the upper levels with most of those absent in the lower academic class levels, or a number of seniors in the lower class levels reported themselves as being in higher class levels, or that grading policies are such that small proportions of seniors receive lower level grades thus supporting their belief they were in the upper levels academically. The reader should keep in mind that reference to class rank is to the one reported by students rather than being based on actual recorded grades.

Data are presented in Table 36 showing the percent of seniors enrolled in each curriculum by perceived class rank. One can see for example, that 63, 33, and 3 percent of the boys, respectively, in the college preparatory curriculum perceived they were in the top, middle, and lowest thirds of their class academically. Three-fourths of the girls and 63 percent of the boys in the college preparatory curriculum indicated they were in the top third of their class. A third of the boys and a fourth of the girls in this curriculum reported they were in the middle third of the class, and only 3 percent of the boys and 1 percent of the girls perceived they were in the lowest third. The largest percentage of students in general, commercial/business, and shop or industrial arts curricula reported they were in the middle third of the class. The largest percentage of seniors in the lowest third of the class appeared in the homemaking and agriculture curricula.

TABLE 36

PERCEIVED CLASS RANK BY HIGH SCHOOL CURRICULUM

High School Curriculum	Percent by Perceived Rank in Class							
	Boys				Girls			
	Top	Mid	Low	Number	Top	Mid	Low	Number
College Preparatory	63	33	3	820	75	25	.7	750
General	25	61	14	885	39	55	6	1,063
Commercial or Business Education	23	63	13	377	34	62	4	694
Shop or Industrial Arts	18	64	18	303	10	85	5	20[*]
Homemaking	44	25	31	16[*]	20	72	8	149
Agriculture	32	42	26	19	13	75	12	8[*]
Other	26	54	17	195	32	59	7	207

---

[*] While it may seem unusual for boys to take homemaking and girls to study agriculture or shop/industrial arts small numbers did report these curricula. Percentages based on these small numbers give the impression of being unrealistically high.

Not shown in Table 36 are the percent distributions of students reporting each class rank enrolled in the several curricula. Such an analysis was undertaken and revealed that boys reported in the top third were distributed among the curricula as follows: 54 percent college preparatory, 23 percent general, 9 percent business, 6 percent shop or industrial arts, 1 percent each in agriculture and homemaking, and 5 percent in "other." Boys reported in the lowest third were distributed as follows: 40 percent general, 17 percent shop or industrial arts, 15 percent business, 9 percent college preparatory, and the other 19 percent were distributed among other curricula. Girls reported in the top third were distributed as follows: 42 percent college preparatory, 31 percent general, 18 percent business, 2 percent homemaking, and the other 7 percent distributed among other curricula. Girls reported in the lowest third were distributed as follows: 46 percent general, 21 percent business, 10 percent homemaking, 4 percent college preparatory, and the other 19 percent were distributed among several other curricula. Nineteen percent of the boys and 12 percent of the girls reported in the middle third were in the college preparatory curriculum, and 36 percent of each were in the general curriculum.

Twenty-seven percent of seniors responding were from homes broken by death, divorce, or separation. Seventeen percent were living with their mother, three percent were living with their father, and seven percent were living with someone other than either parent. Slightly over half, 51 percent, had lived in the high school district over ten years, and another 20 percent had lived there at least six years or since junior high school. Eleven percent of the seniors had lived in their high school district two years or less.

Of the 5,687 seniors from whom information was obtained 22 percent indicated their father had less than a high school education, and 20 percent indicated the same for their mother. Nineteen percent of the fathers and 10 percent of the mothers were reported by seniors to have had a college education. Six percent of both parents were reported to have attended a business or trade school as the highest level of school attained. Fifty-three percent of the fathers and 64 percent of the mothers had a high school education as the highest level attained.

Twenty-two percent of the seniors indicated that they had an older sister who attended college and a fourth had an older brother who had attended college. Thirty-one percent had an aunt or uncle who had attended college, and over half (56 percent) had one or more cousins who had done so. Over two-thirds of the seniors (69 percent) had friends or relatives who had attended classes at one of the Metropolitan Junior College District colleges.

Students were asked to characterize their families' income level. Data on perceptions of seniors about the level of family income are presented in Table 37. Boys and girls were similar in their judgments on the matter. Nearly a tenth (9 percent) indicated the family frequently has difficulty making ends meet or sometimes it has difficulty getting the necessities. Over a tenth (13 percent) indicated they had the necessities but not too many luxuries. Nearly half (49 percent) felt the family was financially comfortable but not well-to-do. A fifth believed they were well-to-do, and 2 percent felt they were wealthy.

Nearly two-thirds (64 percent) of the responding seniors held part-time jobs while attending school. Thirty-four percent of the boys and 44 percent of the girls who worked were reported in the top third of their class. Slightly over half of the working students were reported in the middle third of their class. Twelve percent of the working boys were reported in the lowest third, as were 4 percent of the working girls. Of the non-working boys and girls, 44 and 47 percent, respectively, were reported in the top third of their class and 46 and 48 percent, respectively, were reported in the middle third.

TABLE 37

STUDENT PERCEPTIONS OF FAMILY INCOME

Nature of Family Income	Percent		
	Boys	Girls	Total
Frequently have difficulty making ends meet	5	5	5
Sometimes have difficulty getting the necessities	4	5	4
Have necessities but not too many luxuries	13	13	13
Comfortable but not well-to-do	45	54	49
Well-to-do	22	19	20
Wealthy	3	2	2

Educational Plans of Seniors

Seniors were asked if future plans included continuing their education somewhere (e.g., 4-yr. college, technical school, business college, nurses training school, community college, etc.) after high school graduation. Responses are shown in Table 38 by percent for each of the twenty-two high schools and for all high schools together. Observing Table 38, one can see, for example, that 16 percent of the seniors in school number one indicated their future plans would definitely or probably not include continuing their education; 29 and 38 percent, respectively, indicated future plans would probably or definitely include continuing their education; and, 17 percent did not know if plans would include further school attendance. Other data in Table 38 should be read the same way.

Observing the data, one can see that among the high schools there is a wide range in percent of seniors whose plans definitely include continuing their education. The range was from 25 percent in one high school to 63 percent in another. The range in percentage among the high schools of seniors whose plans definitely do not include further education was from 3 to 28 percent. Among all seniors responding, 45 percent expressed definite plans for continuing their education after high school graduation; and, another 27 percent had future plans that would probably include further education. Thus, 72 percent of all seniors responding thought plans would definitely or probably include continuing their education beyond high school.

TABLE 38

PLANS OF SENIORS FOR CONTINUING THEIR EDUCATION

	Plans by Percent				
School	No Response	No Probably Not	Probably Yes	Yes	Don't Know
		1. Area Served Primarily by Longview			
1	0.6	16	29	38	17
3	0.2	20	28	36	16
4		17	33	40	10
7		12	24	52	12
8		18	29	39	13
10	0.5	13	25	50	11
		2. Area Served Primarily by Maple Woods			
2		13	29	45	12
6	0.5	14	23	54	9
9	0.2	17	22	46	15
		3. Area Served Primarily by Penn Valley			
5	0.3	10	25	49	14
11	2.0	3	26	59	9
12	0.3	7	22	63	7
13		10	33	36	20
14		17	34	32	18
15		6	36	46	12
16	1.0	26	32	25	15
17		28	26	26	20
18		11	28	46	15
19		13	29	40	18
20		22	22	35	21
21		13	24	54	9
22		17	37	30	17
		4. Total Area Served by MJCD			
Overall	0.2	14	27	45	13

Plans for further education are shown by sex in Table 39 for boys and girls. There was virtually no difference in proportions of boys or girls who expressed each of several educational plans. As one can observe, 15 percent of the seniors had plans that definitely or probably would not include continuing their education beyond high school. Twenty-seven percent thought plans would probably include further education, and 45 percent had plans that definitely included more education. Thirteen percent did not know whether plans would include further education beyond high school.

TABLE 39

PLANS FOR FURTHER EDUCATION BY SEX

Plan	Percent		
	Boys	Girls	Total
No	8	9	9
Probably Not	5	6	6
Sub-Total	13	15	15
Probably So	28	26	27
Yes	45	45	45
Sub-Total	73	71	72
Don't Know	13	13	13

Data from an analysis of high school curriculum by whether plans included further education are presented in Table 40. It can be seen, for example, that 2 percent of the boys in the college preparatory curriculum definitely or probably do not include further education in their future plans, while 17 percent will probably continue and 78 percent definitely plan to continue their education. Three percent didn't know. The rest of the data in Table 40 should be read in the same way.

Not surprisingly, there appears to be a direct correlation between the program the student is pursuing in high school and plans for continuing education. About 95 percent of the boys and girls in the college preparatory course indicated they would probably or definitely continue their education, compared to 66 percent of the boys and 69 percent of the girls in the general curriculum. and 69 and 59 percent, respectively, of boys and girls in the business/commercial curriculum. One half of each sex enrolled in agriculture have plans that will probably or definitely include further education. Thirty-seven percent of the boys and 41 percent of the girls in homemaking; and 48 percent of the boys and 70 percent of the girls in industrial arts have similar plans.

TABLE 40

RELATIONSHIP OF HIGH SCHOOL PROGRAM AND PLANS FOR FURTHER EDUCATION

High School Program	Percent By Plan									
	No		Probably Not		Probably So		Yes		Don't Know	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
College Preparatory	1	1	1	1	17	14	78	82	3	2
General	9	10	8	7	31	29	35	40	17	14
Commercial/business	8	13	6	9	40	33	29	26	16	20
Shop or Industrial arts	18	15*	11	5	32	30	16	40	23	10
Homemaking	19*	19	12	11	12	23	25	18	31	29
Agriculture	11	12*	6	12	28	25	22	25	33	25

*Percentages based on 16 boys reporting homemaking, 8 girls reporting agriculture, and 20 girls reporting shop/industrial arts.

Not shown in Table 40 are data from an analysis of the curriculums in which youth are enrolled with different plans for further education. This analysis revealed that 78 and 76 percent, respectively, of boys and girls whose plans definitely included more education were enrolled in the college preparatory and general curricula. Sixty-one percent of the boys whose plans definitely did not include further education were enrolled in the industrial arts or general curriculums, while 73 percent of the girls with similar plans were enrolled in the commercial/business or general curriculum.

Plans were also analyzed by academic rank in class, and these data are presented in Table 41. Shown under each academic class rank category reported by respondents is the percent distribution by plan for continued education. For example, it can be seen that 5 percent of the boys in the top third of their class academically had plans that definitely or probably would not include further education, 18 percent would probably continue, and 72 percent had definite plans to continue. There is a definite correlation between rank in class and plans for continuing education. Data in Table 41 reveal that 72 percent of the boys and 67 percent of the girls in the top third of their class definitely planned to continue their education; 18 percent of the boys and 19 percent of the girls indicated they would probably continue their education. It is interesting to note

TABLE 41

RELATIONSHIP OF PERCEIVED HIGH SCHOOL RANK AND PLANS TO CONTINUE EDUCATION

Plan for Continuing Education	Percent by Perceived Class Rank					
	Top Third		Middle Third		Lower Third	
	Boys	Girls	Boys	Girls	Boys	Girls
No	3	4	9	12	19	26
Probably no	2	3	7	8	11	10
Probably yes	18	19	35	32	27	18
Yes	72	67	34	29	13	12
Don't know	4	6	16	18	30	34

that 69 percent of the boys and 61 percent of the girls in the middle third, and 40 percent of the boys and 30 percent of the girls in the lower third probably or definitely plan to continue their education.

Plans for Next Year After Graduation

To determine whether students were going to continue their education immediately or postpone it for a time, seniors were asked whether they planned to continue their education the next year after high school graduation. The percents of boys and girls by plan of action for the next year after graduation are presented in Table 42. It can be seen, for example,

TABLE 42

SENIORS' PLANS FOR YEAR FOLLOWING GRADUATION

Plan	Percent*		
	Boys	Girls	Total
Work on a job	39	46	43
Become a housewife		12	7
Enter Military service	10	2	6
Work for parents	1	1	1
Attend a community college	18	18	18
Attend a 4-yr. college	37	35	36
Attend a business college	2	4	3
Attend a trade or technical school	10	5	7
Attend nursing school	1	6	4
Plan to travel and see some things	15	13	14
Don't know	7	5	6
Other	3	3	3

*Since some seniors expect to do more than one thing, for example, work and go to school, percents may add to more than 100 percent.

that 39 and 46 percent, respectively, of the boys and girls, or 43 percent of all seniors, plan to work after graduation. The rest of Table 42 should be read likewise.

Observing Table 42, it can be seen that 68 percent of the boys and girls plan to attend some kind of school the next year after graduation. Approximately 4 percent apparently plan to continue their education at a later time. Fourteen percent of all seniors plan to travel and see some things after graduation, and 43 percent expect to work on a job. A tenth of the boys expected to enter military service. Only 6 percent did not know what they would do. Of concern in this study is the fact that only 18 percent of both boys and girls expected to attend a two year community college; 36 percent expect to attend a four year college or university. A tenth of the boys and 5 percent of the girls expect to attend a trade or technical school. Three percent of all seniors expect to attend a business college. Both the percentage of seniors expecting to attend a community college or a four year college or university are similar to percents of seniors recently expressing educational plans in another mid-western three college Community College District. However, in each instance the percentage is considerably lower than the 28 percent found in another multi-campus mid-west community college area who planned to attend a local community college or the percents ranging up to 40 percent of seniors in Michigan community college districts who expect to attend the local community college.

Seniors' plans for the next year after graduation were analyzed by reported high school class rank. Shown in Table 43 opposite each post-graduation plan are the percentages of boys and girls reported in the top, middle, and lower third of their class academically. For example, it can be seen that of the students who plan to work on a job the year following graduation, 29 and 38 percent, respectively, of the boys and girls are in the top third academically; 55 and 58 percent, respectively, are in the middle third, and 16 and 4 percent, respectively, are in the lower third. The remaining data are to be read in the same way.

The seniors' reported rank in class was related to their plans for the next year following graduation. Fifty-nine percent of the boys and 69 percent of the girls who plan to attend a four year college are in the top third of their class. However, of those students who plan to enter a two year college, 59 percent of the boys and 52 percent of the girls are from the middle third of their class. Likewise, 45 percent of the boys and 72 percent of the girls planning to attend business college were in the middle third, and 65 percent of the girls and 77 percent of the boys planning to attend a trade or technical school were from the middle third of their class. Thirty-five and 57 percent of boys and girls planning to attend nursing school were in the middle third. Of those who planned to travel and see some things, most reported being in the middle third by class rank as did those who expected to work, become a housewife, work for parents, join the military service, or didn't know what they planned to do.

TABLE 43

RELATIONSHIP OF PERCEIVED CLASS RANK AND PLANS FOR NEXT YEAR

Plans for Next Year	Percent by Perceived Rank in Class						Total Number	
	Top Third		Middle Third		Lower Third			
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Work on a job	29	38	55	58	16	4	1041	1383
Housewife	--	32	--	62	--	6	--	369
Military	17	27	64	64	19	10	257	63
Work for parents	30	41	59	56	11	4	37	27
Attend 2 yr. college	33	45	59	52	6	3	485	555
Attend 4 yr college	59	69	37	29	4	.8	994	1050
Attend business college	43	24	45	72	10	4	42	124
Attend trade or technical school	20	19	65	77	14	4	257	160
Attend nursing school	35	36	35	57	29	5	16	190
Travel & see things	25	39	57	56	18	5	410	379
Don't know	22	32	56	59	19	8	183	151
Other	23	35	57	55	19	10	632	482

One might also raise the question as to what percentage of persons reporting each class rank have each plan for the year after graduation. Such an analysis reveals that the largest percentage of seniors reported in the lowest third of their class planned to work on a job (53 percent boys and 46 percent girls), travel and see things (23 percent boys and 14 percent girls), become a housewife (18 percent girls), join the military service (15 percent boys and 4 percent girls), and attend a trade or technical school (11 percent boys and 5 percent girls). The largest percentage of those in the top third expected to attend a four year college (61 percent boys and 55 percent girls), work on a job (31 percent boys and 39 percent girls), attend a two year college (17 percent boys and 19 percent girls), or travel to see some things (11 percent of both boys and girls). The largest percent of seniors in the middle third expected to work on a job (40 percent boys and 52 percent girls), attend a four year college (26 percent boys and 20 percent girls), attend a two year college (21 percent boys and 19 percent girls), travel to see some things (17 percent boys and 14 percent girls), or attend a trade or technical school (12 percent boys and 8 percent girls).

To verify seniors' plans for continuing their education, their plans for the year after graduation were cross analyzed with plans for continuing their education. Data presented in Table 44 indicate that 59 percent of the boys and 57 percent of the girls who intend to work on a job next year also expect to continue their education sometime. Likewise, 60 percent of the boys and 64 percent of the girls who plan to travel also plan to get more education. Over one-third (38 percent) of the girls who plan to be housewives and over one-half (55 percent) of the boys who plan to enter military service also plan to continue their education after graduation.

TABLE 44

RELATIONSHIP OF SENIORS' PLANS FOR NEXT YEAR
AND THEIR PLANS FOR CONTINUING EDUCATION

Plans for Next Year After Graduation	Percent by Plan to Continue Education: Probably No & NO		Probably Yes & Yes		Don't Know		Total Number	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Work on a job	21	23	59	57	20	20	1,041	1,383
Housewife	--	43	--	38	--	19	--	369
Military Service	23	18	55	55	22	27	257	63
Work for parents	24	15	54	70	22	15	37	27
Attend 2 yr. college	2	1	94	95	4	4	485	555
Attend 4 yr. college	0.4	0.2	98.6	99.5	1	0.3	994	1,050
Attend bus. college	10	7	83	73	7	20	42	124
Attend trade-tech.	9	8	65	71	26	21	257	160
Attend nursing school	19	3	56	86	25	11	16	190
Travel & see things	16	17	60	64	24	19	410	379
Don't know	15	20	59	42	26	38	183	151
Other	25	21	57	63	18	16	632	482

Another analysis was made to determine what percentage of the respondents with each plan for continuing their education sometime planned to do each of the different things the year after graduation. Most youth with no plans for further education expect to work on a job (57 percent boys and 64 percent girls), travel and see some things (16 percent boys and 12 percent girls), and enter the military service (16 percent boys and 3 percent girls). Seniors with definite plans for attending college expect during the year after graduation to attend a four year university (65 percent boys and 63 percent girls), to attend a two year college (22 percent of boys and girls), to work on a job (26 percent boys and 31 percent girls), or to travel and see some things (11 percent of boys and girls).

Where Seniors Expect to Enroll

Seniors whose plans definitely or probably included continuing their education somewhere after graduation were asked what college or university they planned to attend. These data are presented in Table 45. Observing the data one can see, for example, that 9 and 8 percent of the boys and girls, respectively, expect to attend the University of Missouri in Columbia, while 10 and 9 percent of the boys and girls, respectively, expect to attend the University of Missouri in Kansas City. The rest of Table 45 is to be interpreted in a similar fashion.

Sixteen percent of the students expect to attend a college in the KCMJC District. Five percent planned to attend Warrensburg State College, and 6 percent expected to enroll in a private trade or vocational school or college. Only 0.6 percent expected to attend the Independence Branch of Warrensburg State College, and 1 percent expected to attend the local regional vocational technical institute. A fourth of all seniors expect to continue their education somewhere other than the institutions listed in Table 45.

TABLE 45

WHERE SENIORS EXPECT TO ATTEND COLLEGE

Educational Institution	Percent of All Seniors		
	Boys	Girls	Total
University of Missouri, Columbia	9	8	8
University of Missouri, K.C.	10	9	10
Warrensburg State College	4	6	5
University of Kansas	2	1	2
KCMJC District	15	17	16
Independence Branch-Warrensburg State College	0.7	0.6	0.6
Kansas City Regional Vocational Technical Institute	1	1	1
Private Trade or Vocational School or College	7	6	6
Other School Elsewhere	25	24	25
No Response	25	27	26

An analysis was made to determine the percentages of seniors reported in each academic rank who planned to attend the institution of their choice. In Table 46 under each perceived academic class rank are shown the percentages of boys and girls distributed among the institutions. The largest percentage of seniors expect to attend an institution not listed. The next largest percentage of seniors in the top, middle, and lower thirds of class rank expect to attend a MJCD college. The third largest percentage of students in the top third expect to attend either the University of Missouri in Columbia or in Kansas City. The third largest percentage in the middle and lower third by class rank expect to attend a private trade or vocational school or college. The fourth largest percentage of students in the top and middle third by academic class rank expect to attend Warrensburg State College, whereas the fourth largest percentage in the lower third by class rank expect to attend either Warrensburg State College or the University of Missouri in Columbia.

The largest percentage of boys and girls in the top third, except those who plan to go to an institution not listed, plan to enroll at the University of Missouri in Columbia and in Kansas City (32 percent boys and 24 percent girls). Thus, of students planning on attending a MJCD college, substantial percentages reported being in the top or middle third of their high school class.

TABLE 46

CHOICE OF EDUCATIONAL INSTITUTION BY PERCEIVED CLASS RANK

Educational Institution	Percent by Perceived Class Rank					
	Top Third		Middle Third		Lower Third	
	Boys	Girls	Boys	Girls	Boys	Girls
University of Missouri, Columbia	16	12	7	5	3	2
University of Missouri, K.C.	16	12	8	7	2	2
Warrensburg State College	4	7	5	4	2	3
University of Kansas	3	1	1	1	1	1
KCMJC District	13	17	18	18	9	13
Independence Branch-Warrensburg State College	1	1	1	0.4	1	1
Kansas City Regional Vocational Technical Institute	1	1	2	2	2	--
Private Trade or Vocational School or College	4	5	9	7	8	3
Other School Elsewhere	32	30	22	20	18	12
No Response	10	15	28	36	54	64

Occupational Expectations of Seniors

Students were asked to write the name of the job which would be their first preference for entrance immediately after high school or college graduation. They were asked to indicate their first preference for the type of job they would like to have ten years hence. Results are shown in Table 47 by number and percent for each category into which students' responses were classified. It can be seen, for example, that 464 or 18.6 percent of all senior boys responding indicated a professional job other than nursing as their first job preference. Twenty-three percent or 582 boys expect to be in a professional job ten years hence as first preference. The rest of the data are to be read the same way.

By observing the data one can detect several expected shifts between the type of job seniors prefer to enter following their education and the type of job preference ten years from now. It can be determined that 4.3 and 1.2 percent more boys and girls, respectively, expect ten years from now to be in a profession other than nursing (a job for which at least a Bachelor's degree is required) than expect to enter such a job after completing school. There was also a marked shift for girls who plan to be clerks and secretaries; whereas, 22.8 percent plan to hold this type of job after graduation, the percentage dwindles to 8.4 ten years from now. Although only 1 percent of the girls plan to become housewives immediately upon graduation, 13.7 percent plan to attain this status within the decade. There was a slight decrease in percent over the ten year period in girls aspiring to be nurses, saleswomen, laboratory technicians and beauticians. There was a slight increase in the numbers of women who plan to run their own business. It is possible that some of the girls foresee a possibility of self-employment in the form of home child care, antique or gift shops, and others.

Boys, likewise, indicated that they expected to experience occupational changes over the next ten year period, although none of the shifts were as obvious as those indicated by girls. As previously indicated, there was an increase in the number of boys who expected to be "professionals" ten years from now. There was also an increase (2.1 percent to 5.7 percent) in the number of boys who expected to be running their own business within the decade. There was a decrease in the numbers who expected to be military servicemen, salesmen, draftsmen, machinists or foremen ten years from now. Probably, the boys expect to be upwardly mobile and to move out of these jobs and into managerial or semiprofessional jobs by the end of the decade.

In Table 47 numbers of students expressing interest in different occupational fields are shown to indicate the size of the group interested. If seniors who responded to the study are representative of all seniors within secondary schools of the MJCD then all the numbers could be increased by 39 percent to give a more accurate count of persons interested

TABLE 47

SENIORS' NEAR TERM AND FAR TERM CAREER ASPIRATIONS

Field of Occupational Interest	Boys				Girls			
	Now		In 10 yrs		Now		In 10 yrs	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Professional other than nursing	18.6	464	22.9	582	20.1	565	21.3	619
Nursing	0.1	2	0.1	2	7.3	207	6.2	181
Military	3.8	94	1.5	38	0.8	23	0.4	11
Office-clerk-sec.	1.6	41	0.8	19	22.8	642	8.4	245
Housewife	--	--	--	--	1.1	31	13.7	398
Elect. or electronics	3.1	78	2.7	69	0.1	4	0.1	3
Selling/salesman	2.7	68	0.8	20	4.3	121	0.4	11
Drafting or bldg. trades	6.3	158	4.0	101	0.2	5	0.1	4
Mechanics & machine shop	6.3	157	3.0	77	0.1	4	0.1	3
Agriculture & related	2.4	61	2.5	64	0.5	13	0.3	9
Factory foreman/ worker	2.5	63	0.8	21	0.1	4	--	1
Airline pilot	1.0	24	1.2	30	0.4	11	0.2	5
Art (interior dec.)	1.5	37	1.3	33	2.4	68	2.3	68
Run own business	2.1	51	5.7	144	0.5	14	1.5	44
Lab. tech/med. dent. chem.	0.6	16	0.6	15	3.5	100	2.7	79
Beautician/ barber	0.1	2	--	--	2.0	55	0.9	27
Religious wkr priest minister, etc.	0.6	14	0.6	16	0.5	13	0.6	16
Dancer, entertainer	2.6	65	2.1	54	1.2	35	1.0	29
Law enforcement	2.0	49	2.4	63	0.6	18	0.4	13
Airline service wkr	1.0	17	0.6	15	3.1	88	1.2	36
Food services mgmt.	1.0	18	0.2	6	0.3	9	0.1	4
Computer programmer	2.0	42	1.2	30	1.0	30	1.1	32
Bookkeeping/ accounting	1.0	24	0.6	16	2.1	59	1.4	40
Don't know	7.6	191	9.4	239	4.9	140	8.2	238
No response	30.0	755	35.0	883	20.0	554	27.0	890

in each job category. However since the relative low response was due to absenteeism caused by illness and inclement weather there is good reason to question whether those responding were truly representative.

Seniors planning on continuing in school after high school graduation were asked to name the one curriculum field of greatest interest in which they would like to study. Results are presented in Table 48 by curriculum categories into which responses were classified. Opposite each category are shown the percentages and numbers of seniors indicating interest. One can see, for example, that 674 or a fourth of the boys, and 806 or nearly 27 percent of the girls expressed interest in studying the liberal arts. An additional 9.7 percent of the girls chose teaching and 6.8 percent chose nursing. An additional 6.5 percent wanted to go into other professional level health-related fields. Over 6 percent of the girls were interested in the secretarial-clerical field, and 5.2 percent were interested in general business.

While 6.5 percent of the boys also wanted to go into professional health-related fields, 3.9 percent wanted to go into engineering, 3.5 percent wanted business administration, 3.7 percent wanted general business, and approximately 9 percent wanted to go into a technological area -- metals, drafting, electronics or mechanical. Over 3 percent were interested in agricultural related fields; about 2 percent were interested in architecture; and 2 percent were interested in computer programming.

Seniors Who Do Not Plan on Further Education

Seniors whose plans would definitely or probably not include attending school somewhere after high school graduation were asked to indicate the two reasons of most importance underlying this choice. Observing results shown in Table 49 one can see, for example, that 29 and 27 percent of boys and girls, respectively, or 28 percent of all seniors whose plans did not include more schooling, indicated they were tired of school and had had enough as a reason of first importance. A third of the seniors indicated they wanted to work and make money as the reason of first importance, and 18 percent gave this as a reason of second importance. Thirteen percent of the girls gave marriage as a reason of first importance, while 27 percent consider it of secondary importance. About a tenth of the seniors with no plans for further education gave as a reason of first or second importance that it was too expensive and they couldn't afford it. Desire to work and make money, combined with the reason that that they could not afford to continue in school because it was too expensive, constitute the reasons cited by the largest percentage of seniors not planning on more education. To the extent desire to work and make money reflects a financial reason, this reason may be considered a part of the financial picture which influences students not to continue their education. Marriage, inability to make grades, or both, were other most frequently given reasons for girls not planning on more education.

TABLE 48

FIELD IN WHICH SENIORS WANT TO CONTINUE EDUCATION BY NUMBER AND PERCENT

Field of Interest for Study	Boys		Girls		Total	
	Percent	Number	Percent	Number	Percent	Number
Liberal arts	25.1	674	26.9	806	26.0	1480
Engineering	3.9	104	0.3	9	2.0	113
Business administration	3.5	93	1.5	45	2.0	138
Teaching	1.3	35	9.7	291	6.0	326
Medical, pharmacy, dental, veterinarian, public health	6.5	174	6.5	194	6.0	368
Forestry, agriculture, horticulture	3.2	86	0.5	14	2.0	100
Architecture	1.8	49	0.1	3	1.0	52
Nursing	0.3	9	6.8	205	4.0	214
Mortuary science	0.2	6	--	1	0.1	7
Accounting, semi-professional	1.3	34	1.7	52	2.0	86
General business, semiprofessional	3.7	100	5.2	158	4.0	258
Retailing, semiprofessional	0.3	8	0.5	17	0.4	25
Secretary-clerk, semiprofessional	0.2	6	6.2	185	3.0	191
Lab. tech/med. dent., chem.	0.5	12	2.2	67	1.0	79
Mechanical tech.	4.0	107	0.1	3	2.0	110
Drafting-design tech.	1.2	33	0.5	15	0.8	48
Electronics tech.	3.6	98	0.2	5	2.0	103
Metallurgical & metals tech.	0.5	14	--	1	0.5	15
Machine shop, tool, die/ skilled trade	0.8	21	--	1	0.4	22
Building trades	0.7	20	0.2	5	0.4	25
Other skilled trades	0.8	21	0.3	10	0.5	31
Beautician or barber	0.1	3	1.4	43	0.8	46
Computer programmer	2.0	52	1.1	33	1.0	85
Miscellaneous	4.9	132	4.2	127	5.0	259
Don't know	3.9	105	2.2	66	3.0	171
No response	26.0	692	21.0	636	23.0	1328

TABLE 49

REASONS WHY SENIORS DO NOT PLAN ON MORE EDUCATION

Reason for Not Continuing	Percent of Seniors With No Plans					
	Most Important			Next Important		
	Boys	Girls	Total	Boys	Girls	Total
Tired of school; had enough	29	27	28	3	2	2
Want to work and make money	29	38	34	16	20	18
Too expensive; can't afford it	10	12	11	8	9	9
Want to get married	5	13	9	9	27	20
Parents don't want me to	1	0	1	0	1	0
People who don't go to college earn just as much money	6	2	4	8	5	6
There have been too many riots; I don't want to get involved	2	0	1	1	0	1
Waste of Time	4	2	3	7	4	5
Can't make good enough grades	10	3	6	16	15	15
Live too far away from college; no way to get there	2	1	2	3	2	2
Poor health	0	0	0	2	1	1
Other	1	1	1	28	14	20

Seniors who did not expect to continue their education were asked which types of training or education would interest them the most. Results are shown in Table 50. It is important to note that 73 percent of all respondents did not respond; presumably these are the same 73 percent shown in Table 39 who stated that they planned to continue their education. The 27 percent who did respond were distributed as follows: 9 percent (7 percent boys and 10 percent girls) indicated they would prefer on-the-job training and 5 percent (8 percent boys and 3 percent girls) desired apprenticeships. Under 1 percent wanted to attend night classes in high school or take correspondence courses. Five percent of the boys expected to get their training in the military service. But the largest group (6 percent boys and 11 percent girls) checked "none of the above;" presumably this 9 percent do not want to continue their education in any way, shape or form.

Seniors were asked if they would change plans about continuing their education if more money were available. Five percent of all seniors would definitely change plans, and 8 percent thought "maybe they would do so." When asked how much money they would need through scholarship, loan or other provisions, 7 percent indicated they would need enough to pay all expenses, 5 percent would need enough to pay half the expenses, and 1 percent would need enough to pay less than half the expenses. Thus, 13 percent of all seniors responding might continue their schooling after high school graduation if they had financial help. These seniors do not now plan to continue their education.

TABLE 50

EDUCATIONAL INTERESTS OF SENIORS WHOSE PLANS DO NOT INCLUDE CONTINUING IN SCHOOL

Types of Training	Boys	Girls	Total
No response	73	73	73
Apprenticeship	8	3	5
Post-graduate high school work at night	.5	.3	.4
Military	5	1	3
On-the-job	7	10	9
Correspondence	.8	.7	.8
None of the above	6	11	9

Reasons for Not Enrolling at a MJCD College

Seniors were asked what the reason of greatest importance was if they did not plan to enroll at a MJCD college. Responses are presented in Table 51. The largest percent (12 percent) of seniors citing a reason for not attending indicated they want to get away from home. Eleven percent indicated the program they wanted was not offered. A tenth felt the quality of education was better elsewhere and 9 percent indicated they did not have enough information about MJCD colleges. Fifteen percent of the seniors indicated reasons other than those listed and 11 percent did not give a reason for non-attendance at a MJCD college. Thirteen percent do not plan to continue their education anywhere after graduation from high school. A fourth of all seniors did not respond to the question.

TABLE 51

REASONS WHY SENIORS WOULD NOT ATTEND KCMJC

Reason for Not Attending	Percent Boys	Percent Girls	Percent Total
No Response	11	11	11
I do not plan to continue in school after high school graduation	10	14	13
The program I want is not offered	12	10	11
I want to get away from home	11	12	12
Scholarship to attend elsewhere	3	2	2
Quality of education better elsewhere	11	9	10
Don't have enough information about KCMJC	10	9	9
Don't want to associate with kinds of persons attending KCMJC	3	1	2
Plan to attend KCMJC	13	14	14
Other	14	17	15

Although 16 percent of the seniors indicated they planned to attend a MJCD college, as shown in Table 45, only 14 percent responding to this question indicated they expected to attend a MJCD college.

Factors Related to Plans for Continuing Education

Plans for continuing education are related to stability of home life. Of the girls living with both parents 73 percent had definite plans for continuing their education somewhere and 14 percent did not. Two thirds of the girls from broken homes had definite plans for continuing their education, while 18 percent did not. The same relationships were found to exist for boys.

There is a positive relationship between whether seniors plan on more education and whether they have friends or relatives who had attended a MJCD college. Seniors were asked if they had any friends or relatives who had attended classes at one of the MJCD colleges. An analysis was made of these responses as well as plans of seniors for continuing their education. Ten percent of the boys who had friends and relatives who had attended a MJCD college did not plan to continue their own education, as compared to 19 percent who did not have friends in attendance. On the other hand, two-thirds of the boys with plans for continuing their education beyond high school did not have friends or relatives who had attended at a MJCD college compared to 77 percent with plans for further education who did have friends or relatives who had enrolled. The same relationships existed for girls.

There is a direct positive relationship between the future plans of seniors to include further education and extent to which they had relatives who had continued their education. Seniors were asked which relatives, other than parents had attended college. This information reflects family socia-cultural-educational background. The responses were analyzed according to seniors' plans for continuing their education somewhere after graduation to determine what relationship, if any, might exist. These data are presented in Table 52. It can be seen, for example, that 12 and 13 percent of boys and girls, respectively who had no plans for further education, had an older sister who had attended college and 21 and 15 percent of boys and girls, respectively, who would

TABLE 52

RELATIONSHIP BETWEEN PLANS OF SENIORS AND EXTENT TO WHICH RELATIVES ATTENDED COLLEGE

Relatives	Percent by Plan for College									
	No		Probably No		Probably Yes		Yes		Don't Know	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Older Sister	12	13	21	15	21	21	25	27	17	15
Older Brother	17	23	22	18	23	25	30	28	19	22
Aunt or Uncle	19	23	21	18	29	28	34	44	19	22
Cousin	32	50	44	55	47	56	59	67	47	53

probably not continue in school after graduation also had an older sister who attended college. The rest of the data are to be read likewise. A comparison of the extent to which seniors with definite plans not to continue their education versus those with definite plans to continue (and the extent to which each group had relatives who had attended college) shows in bold relief the positive relationship between these factors. Even as one moves from consideration of the immediate family circle out to more distant relatives, there is a direct positive relationship.

Seniors were asked to indicate the highest level of education attained by each parent. These responses were analyzed against definite youth plans about further education and the results are presented in Table 53.

TABLE 53

PARENTS EDUCATIONAL ATTAINMENT AND YOUTH PLANS FOR EDUCATION BY PERCENT*

Parents' Educational Attainment*	Father				Mother			
	No Plan		Plan		No Plan		Plan	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Eighth grade or less	21	17	8	7	14	12	4	3
Some high school	10	14	8	9	11	14	9	10
High school graduate	31	35	28	29	51	51	44	44
Business/trade school	6	6	6	8	4	3	6	9
Some college	11	10	18	17	6	8	17	19
College graduate or higher	9	6	29	26	6	4	18	14
Don't know	12	12	3	4	9	8	2	2

*Non-responses were excluded so percents are based upon number responding to this question. (6 percent did not respond about father's education, and 4 percent did not respond about the mother's education).

Shown in Table 53 are the percentages of youth by definite plan for education whose parents had achieved various levels of education as the highest one reached. For example, one can observe that of youth whose plans definitely did not include continuing their education 21 and 17 percent of boys and girls, respectively, had fathers whose highest educational attainment was eighth grade or less, and 10 and 14 percent, respectively, had fathers whose highest level of attainment was completing some high school. The rest of the data are to be read likewise. Of all boys not planning on further education 31 and 25 percent, respectively, had fathers and mothers whose highest educational attainment was less than high school graduation.

Sixteen and 13 percent, respectively, of fathers and mothers of boys with definite plans for further education had this level of educational attainment. Likewise, it can be seen that, whereas 20 percent of the boys and 16 percent of the girls whose plans do not include more education had fathers who had attended college, 47 and 43 percent of the boys and girls, respectively, whose plans do include more education had fathers with this level of attainment. A direct positive relationship exists between youth plans for education beyond high school and levels of educational attainment by their parents in the MJCD area.

Youth were asked how they thought their parents felt about whether they should continue in school after high school graduation. Responses to this question were analyzed according to plans expressed by seniors about continuing their education to determine what relationship, if any, might exist. This was done on the assumption that parental encouragement, or lack of it, affects the motivation of youth for education. One can see, for example, from data presented in Table 54, that of boys and girls responding with definite plans for further education, 52 and 38 percent, respectively, reported that their parents insisted or expected them to continue in school after high school graduation. These percentages compare to 10 and 5 percent, respectively, of boys and girls responding whose plans definitely did not include further education and 14 and 7 percent, respectively, of boys and girls who didn't know whether plans would include further education. It can also be seen that, whereas 30 and 36 percent of the boys and girls, respectively, with no plans for more education reported their parents as indifferent, only 2 percent of the

TABLE 54

RELATIONSHIP BETWEEN YOUTH PLANS AND THEIR PERCEPTIONS
OF THEIR PARENTS' ATTITUDES ABOUT CONTINUING IN SCHOOL

Perception of Parents' Attitude	Definite Plans About Further Education by Percent					
	Yes		No		Don't Know	
	Boys	Girls	Boys	Girls	Boys	Girls
Insist or expect me to continue	52	38	10	5	14	7
Want me to continue if I want to do so	44	59	49	50	69	73
Don't care one way or the other	2	2	30	36	13	16
Don't want me to continue	.3	.6	5	4	1	1

seniors with definite plans for more education reported parents who were indifferent about the matter. There was found to be a direct positive relationship between youth plans for continuing their education after high school graduation and the attitudes they perceive their parents have about whether they should continue.

An analysis was made between seniors perceptions of their family income status and their plans for further education beyond high school. These data are shown in Table 55. This analysis was made to determine what relationship, if any, might exist between family financial status as viewed by students and their own plans for further education. Under each definite plan about further education are shown the percentages of seniors evaluating the status of family income in various ways. One can see that 13 and 9 percent of boys and girls, respectively, with no plans for more education indicated the family frequently had problems making ends meet or that they sometimes had difficulty obtaining necessities. On the other hand, 7 percent of boys and 8 percent of the girls with definite plans for more education reported the same family income status. The same relationship existed when percentage data are grouped for youth who report the family as having necessities but not many luxuries or as being comfortable but not well-to-do and for those who judged that they were well-to-do. The relationship was reversed for youth reporting the family as wealthy. While these data do show a direct posivite relationship between educational plans and perceived status of family income, the income status factor does not seem to be as closely related as other factors to plans for continued education.

TABLE 55

STUDENTS' PERCEPTIONS OF FAMILY FINANCIAL STATUS AND FUTURE EDUCATIONAL PLANS

Students' Perception of Family Financial Condition	Definite Plan by Percent			
	No		Yes	
	Boys	Girls	Boys	Girls
Frequent problems making ends meet	8	4	4	4
Sometimes have difficulties getting necessities	5	5	3	4
Have necessities but not many luxuries	14	12	11	13
Comfortable but not well-to-do	38	47	48	58
Well-to-do	17	22	24	19
Wealthy	4	4	3	1
No response	14	6	6	2

Students' Perceptions About High School

Seniors were asked how much help they had received in high school to assist them in formulating educational plans or in deciding what occupation they wanted to enter. Results are shown in Table 56 by perceived class rank and for the entire group of respondents. The purpose was to examine whether students at different reported levels of achievement have different opinions and reactions to their high school experience. Under each perceived class rank are shown the percentages of seniors reporting various amounts of help received from their high school. Observing the data one can observe that increasing percentages of seniors felt they had received lots of help as the reported class rank increased. Conversely, the percent indicating they had received little or no help increased as the reported class rank declined. However, the largest percentage of respondents reporting considerable help were in the middle third. About the same percent in both top and middle third class ranks had received some help but not very much. One can conclude that at the extremes of amount of help received, most help was felt to be received by students perceived to be in the top class rank and the least help by seniors perceived to be in the lowest class rank. One cannot tell from these data whether these perceptions are correct. However, guidance services do seem to be perceived more favorably by the academically able student.

TABLE 56

SENIORS' PERCEPTION ABOUT AMOUNT OF HELP RECEIVED ON CAREER AND EDUCATIONAL PLANNING

Amount of Help Seniors Think They Received	Perceived Class Rank by Percent								
	Top Third		Middle Third		Lower Third		Totals		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Both
A lot of help - all that's necessary	16	17	11	14	7	11	12	15	14
Considerable help, but could have used more	18	21	20	21	14	11	19	21	20
Some help but not very much	29	32	30	31	26	23	29	31	30
Little or no help	35	30	36	33	49	43	37	32	34

An analysis was made of plans for further education according to how much help seniors felt they had received in making occupational and educational plans. The purpose was to determine if there was a difference in the way students planning on further education felt about high school services compared to those who did not plan on further education. Results are shown in Table 57. Under various plans for continuing education are shown the percentages of seniors reporting various amounts of help

TABLE 57

SENIORS' PERCEPTIONS OF COUNSELING SERVICES AND PLANS TO CONTINUE EDUCATION

	Plans to Continue Education					
	No or Probably No		Yes or Probably Yes		Don't Know	
	Boys	Girls	Boys	Girls	Boys	Girls
A lot of help - all that's necessary	10	16	13	15	10	11
Considerable help but could have used more	14	15	20	23	17	20
Some help but not very much	27	25	30	32	26	32
Little or no help	47	40	34	29	44	33
No response	2	4	3	1	3	4

received. Observing the data, one can determine that a larger percentage of girls whose plans definitely or probably include continuing their education felt they had received more help than the percentage of girls whose plans did not include continuing their education. However, a larger percentage (65 percent) of girls not planning on further education felt they had received less help than girls whose plans did include more education (61 percent).

A higher percentage of boys whose plans included further education felt they had received a lot or considerable help (33 percent) compared to boys whose plans did not include more education (24 percent). A higher percentage of boys whose plans did not include more education felt they had received some, little or no help (74 percent) than boys whose plans included more education (64 percent). Thus, boys and girls not planning on further education felt they had received less help in educational and occupational planning than other seniors. These data do not reveal whether students' perceptions are accurate or whether guidance services tend to favor boys and girls who do plan on further education.

Seniors were asked to give some indication as to the way in which selected high school services and facilities had helped them. They were asked to evaluate facilities and services as "good," "fair," or "poor." These evaluations were then analyzed by class rank to determine if there were differences among students with different academic backgrounds relative to how they evaluated different services and facilities. Data in Table 58 show under each perceived class rank and opposite each service or facility the percentage of seniors who evaluated the item as "good," "fair," or "poor." For example, it can be seen that 20, 34, and 36 percent of the boys in the top third by class rank, respectively, evaluated as "good," "fair," and "poor" the provision of someone in whom they could confide about problems. The rest of the data are to be read

TABLE 58

SENIORS' EVALUATION OF HIGH SCHOOL SERVICES AND FACILITIES BY REPORTED RANK IN CLASS

Evaluation of School Services and Facilities	Percent by Perceived Rank in Class*							
	Top Third		Middle Third		Lower Third		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Someone to confide in about problems								
good	20*	25	20	22	18	22	20	23
fair	34*	35	29	34	22	24	30	34
poor	36*	34	33	34	36	38	34	34
Library materials on vocations								
good	24	26	23	27	22	22	23	26
fair	43	51	41	46	31	40	40	48
poor	23	17	18	16	23	20	20	16
Offering many courses from which to select								
good	35	42	28	31	19	28	29	36
fair	41	42	36	42	32	34	37	41
poor	15	12	19	17	24	20	18	15
Information on going to college								
good	42	56	37	44	31	30	38	49
fair	37	31	34	34	25	35	34	32
poor	12	7	11	11	19	17	12	10
Social activities								
good	30	40	25	30	21	21	27	34
fair	41	38	36	37	32	34	37	37
poor	17	15	19	19	21	25	19	17
Someone to confide in about personal problems								
good	12	16	14	16	12	14	13	16
fair	28	29	24	27	19	22	24	27
poor	48	48	43	44	44	46	44	46

*Differences between sum of percents and 100 are due to non-response.

in a similar fashion. Shown also are the evaluations rendered by all seniors. The largest percentage of all seniors evaluating each service or facility is underlined for ease of interpretation.

Observing the data, one can determine that the largest percentage of boys and girls evaluated as "good" or "fair" all services and facilities except the provision of someone in whom they could confide about personal and other problems. The provision of someone in whom they could confide about personal problems was evaluated as "poor" by 44 and 46 percent of all boys and girls, respectively, while the presence of someone in whom to confide about other problems was evaluated as "poor" by 34 percent of both boys and girls. Thirty-four percent of the girls also evaluated this service as "fair." As perceived class rank increased, an increasing percentage of seniors evaluated these provisions as "fair" or "poor." This was also the case regarding library materials pertinent to vocations. As perceived class rank increased, increasing percentages of seniors evaluated the offering of many courses and information on going to college as "fair" and "good." As class rank increased, an increasing percentage of seniors evaluated social activities as "good." As class rank declined, an increasing percentage of seniors evaluated this service as "poor."

Responses on plans about further education were analyzed according to the amount of help seniors reported receiving from selected services and facilities. These data are shown in Table 59. Under each plan about further education are shown the percentages of boys and girls who gave evaluations of "good," "fair," and "poor" to each service or facility. The largest percentages for boys and girls reporting an evaluation of a service or facility are underlined for students having definite negative or affirmative plans for continuing their education. Data contained in Table 59 are to be read in a fashion similar to those in Table 58.

The data reveal that the largest percentage of students, regardless of plan for further education, evaluated as "poor" the provision of someone in which to confide about personal problems. Likewise, the largest percentage of seniors without plans for more education and boys with plans for more education evaluated as "poor" the provision by the high school of someone in whom to confide about problems. The largest percentage of girls with plans for further education evaluated this service as "fair." As the prospect for continuing education increased, a larger percentages of girls evaluated this service as "good", and as the prospect declined, larger percentages evaluated it as "poor." The largest percentage of seniors with or without plans for further education evaluated as "fair" the offering of many courses from which to choose, and as "good" the provision of information on going to college. As the prospect of school continuance increased a larger percentage of seniors evaluated both of these provisions as "good." As the prospect declined, a larger percentage of seniors evaluated the provisions as "poor." The largest percentage of seniors with plans for more education and girls whose plans did not include more education evaluated library materials on vocations as "fair." The largest percentage of boys with no plans for further education evaluated this provision as "poor." Social activities were evaluated as "fair" by the largest percentage of seniors

TABLE 59

SENIORS' EVALUATION OF SERVICES AND FACILITIES AND PLANS ABOUT CONTINUING EDUCATION

Evaluation of Help From Services and Facilities	Plans to Continue Education by Percent									
	No		Probably No		Probably Yes		Yes		Don't Know	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Someone to confide in about problems										
good	13	24	17	14	19	21	22	26	19	23
fair	20	30	30	26	29	36	33	35	27	34
poor	41	34	34	47	34	35	34	33	32	30
Library materials on vocations										
good	18	22	17	27	25	27	24	27	20	25
fair	25	42	41	40	41	46	43	51	38	47
poor	31	23	24	19	16	15	21	16	20	14
Offering many courses from which to select										
good	18	27	24	31	27	36	34	40	23	30
fair	31	44	35	37	35	41	40	42	35	41
poor	25	18	24	21	19	14	16	13	20	17
Information on going to college										
good	27	41	36	43	33	48	45	56	29	37
fair	24	30	31	34	37	35	34	30	35	37
poor	22	14	15	11	11	8	11	8	14	12
Social activities										
good	17	28	17	25	24	31	33	42	22	24
fair	30	34	38	38	38	37	39	38	35	38
poor	27	23	24	21	18	20	16	13	20	23
Someone to confide in about personal problems										
good	10	21	13	10	12	15	14	16	12	15
fair	15	22	22	21	23	26	28	29	23	31
poor	48	43	46	51	44	47	45	47	43	40

with no plans for further education as well as by boys with plans for further education. The largest percentage of girls with plans for college evaluated social activities as "good." As the prospect of continuing education increased, the percentages of seniors evaluating social activities as "good" increased. In general, students with no plans for further education (compared to students who expect to continue their education) evaluated lower all services and facilities, excluding someone in which to confide about personal and other problems. Regarding the latter services, evaluations were about the same.

CHAPTER VIII

STUDY OF COMMUNITY COLLEGE STUDENTS

Part 1 - Information from Fall Registrations

During the Fall semester 1972, students enrolling at colleges of the Metropolitan Junior College District responded to a questionnaire as part of the registration process. Data from these questionnaires are presented here for 8,928 students by college in which they were enrolled.

Characteristics of Students

Shown in Table 60 are the total numbers of students responding at each campus and the percentage of students responding according to ethnic background. Observing the data it can be seen, for example, that at Longview Community College there were responses from 2,879 students and that 97 percent were Caucasian/white, 1.3 percent were Negro/black, .2 percent were American Indian, .2 percent were Oriental, .5 percent had Spanish surnames, .2 percent had some other ethnic background, and .5 percent did not respond. The rest of the data are to be read in similar fashion. It can be seen that over three out of every ten students enrolled at Penn Valley are Negro/black or have Spanish surnames. Of all students attending one of the campuses, nearly a fifth (19.2 percent) were non-Caucasian/white.

TABLE 60

PERCENT OF STUDENTS BY ETHNIC BACKGROUND

Ethnic Backgrounds of Students	Longview N=2879	Maple Woods N=1564	Penn Valley N=4485	Totals 8928
Caucasian/white	97.0	97.1	63.1	80.0
Negro/black	1.3	0.9	31.4	16.4
American Indian	0.2	0.2	0.2	0.2
Spanish Surname	0.5	0.6	2.3	1.4
Oriental	0.2	0.3	0.9	0.6
Other	0.2	0.3	0.9	0.6
Non-Response	0.5	0.6	1.1	0.8

Thirty-seven percent of the men students were veterans of the U.S. Armed Services as were 1.5 percent of the women students. Slightly over two thirds (68 percent) of the female students were age 25 and under as were approximately three fourths (74 percent) of the male students. Nineteen percent of the male students and 17 percent of the female students were age 26-35, while 7 and 15 percentages,respectively,of the male and female students were age 36 and over. The age distribution pattern was the same at each of the three colleges with only slight variations of several percentage points. The greatest variation was at Penn Valley College where 71 and 66 percentages, respectively, of male and female students were age 25 and under and 23 and 17 percentages, respectively, were age 26-35.

Students were asked where they lived. Data were analyzed by college and are presented in Table 61. A larger proportion of all the men than of all the women students lived with parents. A third of the women and 27 percent of the men lived in their own homes. A fifth of all women and 23 percent of all men lived in a one-room or apartment dwelling. Three percent of all respondents lived elsewhere. Further observation reveals that the largest percentage of students living with parents were attending Longview Community College, the largest percentage living in their own home were attending Maple Woods Community College, and the largest percentage living in a one room or apartment dwelling were attending Penn Valley College. The smallest percentage of students living in a one room or apartment dwelling were attending Longview Community College, and the smallest percentage living with parents or in their own home were attending Penn Valley Community College.

TABLE 61

WHERE STUDENTS LIVED

Places Where Students Live	Percent							
	Longview		Maple Woods		Penn Valley		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
With Parents	53	53	51	42	37	39	46	43
Own Home	28	33	31	43	26	31	27	33
Room or Apt.	15	12	15	13	33	25	23	20
Other	3	2	3	2	4	4	3	3

Percentages of students enrolled full-time and part-time are shown in Table 62 for each college. It can be seen, for example, that 46 and 55 percent of the men and women, respectively, in the District are enrolled part-time, 43 and 34 percent, respectively, are enrolled full-time, and 8 and 7 percent, respectively, did not respond. Of the students responding, the largest percentage enrolled on a part-time basis were at Maple Woods and Penn Valley Community Colleges where 52 percent of all respondents were enrolled in fewer than twelve semester hours. The smallest percentage of part-time students were at Longview Community College. At Maple Woods Community College 19 percent of the students did not respond to this question; had they responded, the picture may have been different.

TABLE 62

ENROLLMENT STATUS

College	Percent Part-Time*			Percent Full-Time			Percent No Response		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Longview	45	51	47	47	42	45	8	7	8
Maple Woods	45	62	52	33	22	29	22	16	19
Penn Valley	48	55	52	44	35	39	8	10	9
Totals	46	55	50	43	34	39	11	10	11

*Less than 12 semester hours.

Students were asked to indicate the highest level of education attained by parents, and these responses are presented in Table 63. Percentages are shown of fathers and mothers by highest level of education attained as indicated by men and women students. For example, 9 and 10 percent of the men and women at Longview Community College indicated their father had an elementary education only, while 6 percent of both men and women students indicated their mother had an elementary school education. Twelve and 10 percent of the men and women students, respectively, indicated their father had some high school, and 30 and 28 percent, respectively, reported their father was a high school graduate. The rest of the data are to be interpreted likewise. In general, it can be seen that higher percentages of fathers than mothers of students attending each college had attained levels of education at the bachelor's and higher degree levels.

Slightly more than 27 and 23 percent of fathers and mothers, respectively, of Penn Valley Community College students were reported as having less than a high school education. This compares with slightly more than 20 and 17 percent, respectively, of Longview students', fathers and mothers and approximately 23 and 19 percent, respectively, of Maple Woods students' fathers and mothers. Higher percentages of mothers than fathers for students enrolled at each campus were reported as having completed a high school level of education.

Students were asked to indicate the occupation of their father and mother. The percentages of students whose parents were reported engaged in each of several types of occupations are shown in Table 64. It can be seen that the largest percentage of fathers (nearly a fourth) were semi-skilled workers or general laborers, and the largest percentage of mothers were housewives. The largest percentage of working mothers were in sales or skilled clerical work. The next largest percentage of fathers were in managerial or executive type work and the next order of percentage of working mothers were in semiprofessional/technical and semi-skilled or general laborer types of work. The highest percentage of students reporting parents as being engaged in professional work requiring a doctorate or advanced professional degree attended Penn Valley, Longview, and Maple Woods Community Colleges in that order.

TABLE 63

PERCENT OF PARENTS BY REPORTED LEVEL OF EDUCATIONAL ATTAINMENT

Parents'	Longview		Maple Woods		Penn Valley		Total	
Education	Male	Female	Male	Female	Male	Female	Male	Female
Elementary								
Father	9	10	10	10	12	12	11	11
Mother	6	6	5	7	7	8	6	7
Some High School								
Father	12	10	14	12	16	15	14	13
Mother	12	11	12	15	16	14	14	14
High School Graduate								
Father	30	28	32	30	26	24	28	26
Mother	43	42	47	37	37	34	41	36
Some College								
Father	15	20	15	17	15	13	15	15
Mother	13	16	16	15	15	15	14	15
Associate Degree								
Father	3	2	3	2	2	2	3	2
Mother	4	2	2	3	3	3	3	3
Bachelor's Degree								
Father	6	6	6	6	6	4	6	5
Mother	3	4	3	4	4	3	3	3
Masters or Equivalent								
Father	4	3	3	3	4	3	3	3
Mother	1	2	2	3	2	1	2	2
Doctorate or Prof. Degree								
Father	1	2	2	3	2	2	2	2
Mother	0.3	0.3	0.3	0.3	0.5	0.8	0.4	0.6

TABLE 64

PARENTS' OCCUPATIONS BY PERCENT

Occupation	Longview		Maple Woods		Penn Valley		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Professional (Doctorate or advanced prof. degree)								
Father	2	2	2	3	3	3	2	3
Mother	0.3	0.4	0.2	0.2	0.2	0.3	0.2	0.3
Professional (Masters or equivalent)								
Father	6	6	5	6	5	5	5	5
Mother	2	3	2	5	3	3	2	3
Managerial or Executive								
Father	15	15	16	16	11	8	13	11
Mother	2	2	2	2	2	1	2	2
Semi-professional or technical								
Father	6	6	7	6	5	3	6	4
Mother	5	3	5	6	7	7	6	6
Public official or supervisor								
Father	6	5	4	4	5	3	5	4
Mother	1	2	1	1	2	2	1	1
Small business proprietor or farm owner								
Father	8	9	7	10	7	7	8	8
Mother	2	2	1	2	2	2	2	2
Sales or skilled clerical								
Father	4	4	5	5	5	4	5	4
Mother	19	20	19	19	16	14	18	16
Semi-skilled or general laborer								
Father	22	22	28	22	27	25	25	24
Mother	6	4	5	5	7	8	6	6
Housewife								
Father	-	-	-	-	-	0.2	0.2	-
Mother	40	41	45	37	37	33	40	36
Retired								
Father	7	8	7	7	10	10	9	8
Mother	3	3	3	3	4	3	3	3
Unemployed								
Father	0.6	0.3	0.8	0.2	1	1	1	1
Mother	2	2	2	2	3	3	2	3

How Students Get to College

Shown in Table 65 under each college name are the percents of men and women students who reported living different distances from the college where they are enrolled. A slightly higher percentage of men than women attending Longview and Maple Woods reported living over ten miles from the campus; the converse is the case at Penn Valley where a slightly higher percentage of women than men report living that far away. A higher percentage of Penn Valley students than others reported living within five miles of the campus. Higher percentages of students at Longview report living further from the campus than students attending other colleges. Of all students, slightly more than 40 percent report living within five miles of the college they are attending, 35 percent reported living 6-10 miles from the college, 14 percent live 11-15 miles away, and slightly more than 9 percent lived over 15 miles distance, about 2 percent did not respond.

TABLE 65

PERCENT OF STUDENTS BY DISTANCE FROM HOME TO COLLEGE

One Way Distance In Miles	Longview		Maple Woods		Penn Valley		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
0- 5	31	30	41	38	50	44	41	40
6-10	40	44	37	42	29	29	35	35
11-15	17	16	12	13	12	13	14	14
Over 15	11	8	10	6	8	10	10	9
No Response	1	1	1	2	1	4	1	3

Data showing how students get to college are presented in Table 66 by percent of men and women using several modes of transportation. Regardless of college attended, most students drive their own car. The most students taking a bus or riding in a car pool attend Penn Valley College. Higher percentages of men than women ride a bus, ride in a car

TABLE 66

PERCENT OF STUDENTS BY MODE OF TRANSPORTATION

Type of Transportation	Longview		Maple Woods		Penn Valley		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Car Pool	4	10	2	6	4	6	3	7
Drive Own Car	94	86	96	92	83	68	89	76
Bus	0.1	0.1	--	--	6	16	3	9
Other	1	2	1	1	6	9	4	6
No Response	0.9	1	1	1	1	1	1	1

pool or use some other form of transportation other than their own car such as walking, motor bike, etc. The highest percentage of students driving their own car attend Maple Woods even though a higher percentage of students attending Longview live furthur from the campus. At Longview there is greater use of car pools by students.

An analysis was made between one way distance between college attended, place of residence, and mode of transportation used by students attending each college. These data are shown in Table 67. Opposite each category of distance and college are shown the percentage of students using each mode of transportation. For example, It can be seen that 5 percent of Longview students living witnin five miles of the college ride in a car pool, 93 percent drive their own car, .1 ride a bus, and 2 percent cover the distance some other way. Observation reveals that regardless of distance traveled higher percentages of students enrolled at Maple Woods own their car and higher percentages of students attending Longview use car pools. About the same percentage (approximately a tenth) of students attending Penn Valley ride a bus regardless of distance they live from campus. About an eighth of the students at Penn Valley living within five miles of the campus use some mode of transportation other than riding in a car or bus.

TABLE 67

MODE OF TRANSPORTATION TO COLLEGE BY DISTANCE OF HOUSE

Living Distance From College One Way From Colleges	Parents*			
	Car Pool	Own Car	Bus	Other
0-5 miles				
Longview	5	93	0.1	2
Maple Woods	4	94	-	1
Penn Valey	4	71	11	12
Total	4	81	7	8
6-10 miles				
Longview	6	92	0.1	2
Maple Woods	4	95	-	1
Penn Valley	7	79	10	4
Total	6	87	4	2
11-15 miles				
Longview	8	90	-	2
Maple Woods	3	95	-	1
Penn Valley	5	83	8	3
Total	6	87	4	2
Over 15 miles				
Longview	8	89	-	2
Maple Woods	5	93	-	1
Penn Valley	8	78	10	3
Total	8	84	5	2

*Percents may not add exactly to 100 due to rounding.

Reasons for College Attendance

In Table 68 are presented for each college percentage data relative to reason reported by students for attending college. Desire to enter a professional occupation requiring a bachelor's or higher degree was identified by the largest percentage of students at each college as the reason of most importance. The second highest percentage at each college gave skill acquisition for job advancement as their reason for attending college. Except for Penn Valley students, the third largest percentage desired a broader educational background. The reason of next highest order for Penn Valley students was the desire to enter an occupation requiring technical skills and/or associate degree. Higher percents of women than men on all campuses are attending because of desire for a broader educational background. The largest percentage indicating this reason was at Maple Woods. Only a small percentage indicated they were attending college because of strong encouragement from parents. About 44 percent of all respondents indicated either job preparation or upgrading for job advancement as the reason of most importance.

TABLE 68

PERCENT OF STUDENTS BY REASON FOR ATTENDING COLLEGE

Reason for College Attendance	Longview		Maple Woods		Penn Valley		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Both
To Secure Skills Necessary for Job Advancement	27	23	28	27	26	24	27	24	26
Desire Broader Educational Background	16	24	18	30	19	21	18	23	20
Want to Enter Occupational Field Requiring Technical Skills and/or Associate Degree	15	18	15	15	16	29	15	24	19
Strongly Encouraged by Parents	1	2	2	0.5	1	0.7	1	0.8	1
Want to Enter Professional Occupation Requiring Bachelors or Higher Degree	32	25	32	22	35	23	33	23	29

Students were asked to indicate what the most important reason was as to why they selected a community college. In the column under each college and opposite each of several reasons shown in Table 69 are the percents of men and women who indicated each of the reasons. The reader can see, for example, that 36 and 34 percentages of the men and women, respectively, at Longview indicated they selected a community college because of low cost; 13 and 16 percentages, respectively, selected a community college so they could live at home; but, 16 and 11 percentages, respectively, made their choice so they could continue to work in their home town. Other data are to be read likewise.

All three reasons mentioned above are related to financial advantage and convenience. Together they constituted the reasons why 65 and 56 percentages of all men and women, respectively, selected a community college. Higher percentages of students at Longview and Maple Woods as compared to Penn Valley attended a community college because they could live at home or continue to work in their home town. A higher percentage of students at Penn Valley than at the other colleges selected a community college because of low cost and to obtain a special course or program of courses. The latter reason was cited by over a fourth (26 percent) of the women and 16 percent of the men attending Penn Valley. Approximately one-tenth of the students had selected a community college to try their hand at college level work (7 percent) or because they could not get into a college of their choice (3 percent). The percentage choosing a community college because they wanted to be with friends was negligible (less than half of one percent).

TABLE 69

PERCENT OF STUDENTS BY REASON FOR SELECTING A COMMUNITY COLLEGE

Reason	Longview		Maple Woods		Penn Valley		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Both
Low Cost	36	34	33	31	42	35	38	34	36
Live at Home	13	16	14	14	8	8	11	11	11
Can Continue to Work in Home Town	16	11	19	14	15	11	16	11	14
Want to Try College Work	5	9	7	10	7	8	6	8	7
Could Not Get Into College of First Choice	2	1	3	1	5	2	3	2	3
Want Special Course or Program of Courses	11	13	11	14	16	26	13	21	16
Want to be With Friends	0.2	0.4	0.1	--	0.5	--	0.3	0.1	0.2
Other	7	8	7	9	5	6	6	7	6
No Response	8	8	6	6	2	4	5	5	5

Students were asked to indicate whether the college they were attending was their first, second, or third choice. These data are presented in Table 70. Over three-fourths (76 percent) of all students indicated their college was a first choice. Among the colleges, the highest percent of students at Penn Valley indicated that the college they were attending was first choice. Fourteen percent of men and women indicated the college they attended was second choice and 3 percent of all students indicated it was third choice. Seven percent did not respond. The high percent having selected the college attended as first choice reflects well upon the MJCD colleges and indicates that they are not considered by students enrolled to be institutions where persons go who cannot attend elsewhere or as colleges of last resort.

TABLE 70

PERCENT OF STUDENTS ACCORDING TO ORDER OF CHOICE FOR MJCD

College	First Choice		Second Choice		Third Choice		No Response	
	Male	Female	Male	Female	Male	Female	Male	Female
Longview	73	75	14	13	3	3	10	9
Maple Woods	76	77	14	14	2	2	8	7
Penn Valley	78	77	15	14	3	3	4	6
Total	76	76	14	14	3	3	7	7

Financial Circumstances

Data on the financial status of students are shown in Table 71. Over half (58 percent of the men and 56 percent of the women) of all students reported being financially independent of parents. The largest percentage of financially independent students were at Penn Valley as was the smallest percentage either partially or wholly dependent upon parents. Two-thirds of the men and 60 percent of the women at Penn Valley were financially independent of parents. The largest percentage of students partially dependent upon parents (34 percent of the men and 29 percent of the women) were enrolled at Longview and the largest percentage wholly dependent on parents were enrolled at Maple Woods.

TABLE 71

PERCENT OF STUDENTS BY FINANCIAL STATUS

Financial Status	Longview Male	Longview Female	Maple Woods Male	Maple Woods Female	Penn Valley Male	Penn Valley Female	Total Male	Total Female
Wholly Dependent on Parents	7	16	10	14	8	13	8	14
Partially Dependent on Parents	34	29	31	22	23	21	29	23
Independent	51	48	54	57	66	60	58	56

Students were asked to indicate the category of annual income which fit their earnings if they were financially independent or to undertake the same task for parents if they were financially dependent. Results are presented in Table 72. Percentages shown in Table 72 are based upon the total numbers of men, women, and both enrolled at each college and in all colleges. Interpretation of the data shown in Table 72 starting in the upper left hand corner of Table 72 is as follows: .8 and .6 percent of all

TABLE 72

INCOME LEVELS OF DEPENDENT'S PARENTS AND OF INDEPENDENT STUDENTS

Income Levels in Dollars	Longview Male	Longview Female	Maple Woods Male	Maple Woods Female	Penn Valley Male	Penn Valley Female	Total Male	Total Female
0-2,999								
Dependent's Parents	0.8	0.6	0.8	0.5	2	3	1	2
Self Income	12	12	9	8	15	15	13	14
3,000-5,999								
Dependent's Parents	2	2	2	2	5	6	3	4
Self Income	14	10	10	16	17	25	15	20
6,000-7,499								
Dependent's Parents	3	3	2	3	5	5	4	4
Self Income	10	10	8	10	12	11	10	10
7,500-8,999								
Dependent's Parents	5	5	5	2	4	4	4	4
Self Income	7	6	10	5	10	5	9	5
9,000-11,999								
Dependent's Parents	13	11	13	7	8	6	11	7
Self Income	11	6	16	6	12	4	12	5
Over 12,000								
Dependent's Parents	21	18	22	18	12	9	17	12
Self Income	8	7	8	10	6	3	7	5

men and women, respectively, attending Longview are financially dependent on parents whose income level is reported to be less than $3,000. Likewise, it can be seen that 12 percent of all students attending Longview are financially independent and have an annual income less than $3,000. The rest of the data are to be read in the same way. One can see that the highest percentages of financially independent men and women at a low income level were enrolled at Penn Valley, Longview, and Maple Woods Community Colleges in that order. The largest percentages of financially dependent men and women whose parents' incomes were reported above $9,000 were at Longview, Maple Woods, and Penn Valley Community Colleges in that order. In general, except for the highest income levels, the largest percentage of men and women students attending community colleges are financially independent. These students appear to be working people who are attempting to educate themselves.

One percent of the women and 28 percent of the men in MJCD colleges were using the G.I. Bill. Observing data in Table 73, one can see that 87 and 73 percent of all men and women expected employment off campus. This was 81 percent of all students. Over half (51 percent) of the men and 40 percent of the women expected to work 33-40 hours a week while attending college. Over a fourth of the women (26 percent) and 23 percent of the men expected to work less than 24 hours per week, while a tenth of the men and 6 percent of the women expected to work 25-32 hours per week. The largest percentage of men who expected to work off campus were at Maple Woods, Longview, and Penn Valley Community Colleges in that order. However, the largest percentage of women who expected to work off campus were at Penn Valley. These data corroborate the fact that high proportions of community college students are employed while attending college.

TABLE 73

PERCENT OF STUDENTS BY WORK EXPECTATION

Work Expectations	Longview		Maple Woods		Penn Valley		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Expect Employment Off Campus	88	70	89	69	84	75	87	73
1-15 Hours	8	11	8	10	9	13	8	12
16-24 Hours	17	17	13	11	14	13	15	14
25-32 Hours	12	8	9	5	8	5	10	6
33-40 Hours	49	32	56	41	52	43	51	40

Of all men and women students, 7 and 9 percent, respectively, were applying for financial aid from MJCD. The percentages ranged from 5 percent of men and women at Longview to 9 and 12 percent of men and women, respectively, at Penn Valley. Most students applying for financial aid were seeking a scholarship or grant.

The percents of students receiving some of their college expenses from contributions by other persons are shown in Table 74. It can be seen that, of the total student body, nearly two-thirds of the men (64 percent) and nearly one-half the women (49 percent) were receiving no financial assistance from others. The largest percentages of students receiving no financial contributions from others were enrolled at Penn Valley, Maple Woods, and Longview in that order. The largest percentages of students receiving financial assistance for all or nearly all their college expenses were at Maple Woods, Longview, and Penn Valley in that order. Nine percent of all students received from one-half to three-fourths of their expenses from others, while 13 and 28 percentages of the men and women, respectively, received all or nearly all money for expenses from others.

TABLE 74

PERCENT OF STUDENTS WITH AMOUNT OF COLLEGE EXPENSES CONTRIBUTED BY OTHERS

Amount of Contributed Expenses	Longview		Maple Woods		Penn Valley		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
All or Nearly All	14	35	15	38	11	23	13	28
About Three-Fourths	5	5	4	3	2	3	3	4
About One-Half	7	5	5	5	5	5	6	5
About One-Fourth	6	4	5	3	5	4	5	4
None	58	40	63	42	70	54	64	49

Future Educational Plans of Students

Students were asked if they planned to return next semester. Of all responding men and women, 90 and 88 percent, respectively, expected to return; 7 and 8 percent, respectively, did not expect to return; and, 3 and 4 percent, respectively, did not respond. The highest percentage of men and women, 93 and 87 percent, respectively, were attending Maple Woods, and the lowest percentage of students expecting to return, 90 and 86 percent, respectively, were at Longview. The largest percentage of men and women students not expecting to return, 8 and 12 percent, respectively, were at Longview. Students were then asked what college they planned to attend next semester. An analysis of these responses is indicative, as shown in Table 75, of the percentages of students who expect to return or to

TABLE 75

CAMPUS WHERE STUDENTS PLAN TO ATTEND NEXT SEMESTER

College Where Now Enrolled	Percent by Where Students Plan to Attend					
	Longview		Maple Woods		Penn Valley	
	Male	Female	Male	Female	Male	Female
Longview	90	85	0.3	0.4	0.6	1
Maple Woods	0.1	0.3	92	86	2	1
Penn Valley	0.2	0.4	0.6	0.2	87	90

attend a college other than the one at which they were presently enrolled. Data shown also corroborate the fact that the highest percentage of students planning to return to the same college was at Maple Woods and the lowest percentage was at Longview. It can be observed that the largest percentage of students planning to move to any one of the other colleges was from Penn Valley to Maple Woods (2 and 1 percent of men and women, respectively).

There were 34 students (17 boys and 17 girls) enrolled at Longview who expected to attend either of the other two campuses during the following semester. Sixteen men and 10 women currently enrolled at Maple Woods expected to attend another college the following semester as did 19 men and 14 women enrolled at Penn Valley.

TABLE 76

PLACES TO WHICH STUDENTS PLAN TO TRANSFER

Institution for Transfer	Percent							
	Longview		Maple Woods		Penn Valley		All Colleges	
	Male	Female	Male	Female	Male	Female	Male	Female
UMKC	20	22	21	14	34	25	26	22
MU-Columbia	6	4	5	3	3	2	5	2
MU-Rolla	4	0.5	0.6	0	1	0.1	2	0.2
CMSC	7	4	3	2	4	2	5	2
Rockhurst	2	0.9	1	1	4	1	3	1
Other Mo. Public	2	2	4	4	1	6	2	2
Mo. Private	0.7	2	1	2	1	2	1	2
KU	3	0.5	1	1	2	1	2	1
Ks. State	1	0.2	0.2	0	0.4	0.4	0.6	0.3
Other Ks. Public	0.2	0.1	0.1	0	0.1	0	0.1	0.1
Ks. Private	0.1	0.2	0.2	0.2	0.1	0	0.1	0.1
Other	9	9	9	7	13	9	11	9

Presented in Table 76 are the percentages of students enrolled in MJCD colleges by where they expect to transfer for further education after they leave the MJCD. Observing the data, one can see that a fifth of the men and 22 percent of the women planned to attend the University of Missouri at Kansas City and 6 and 4 percent, respectively, expected to attend the University of Missouri in Columbia. The largest percentage expecting to attend UMKC were at Penn Valley and the next highest percentage were at Longview. The next largest percentage of all students expected to attend Central Missouri State College or somewhere else other than institutions in Missouri or Kansas. The largest percentage of students expecting to transfer to a private college in Missouri were enrolled at Maple Woods. Of all students responding 58 percent of the men and 42 percent of the women expect to transfer somewhere for further education.

Students were asked to what degree they aspired as their ultimate educational objective. Results shown in Table 77 indicate that the largest percentage of women aspire to an associate degree or its equivalent, while the largest percentage of men expect to earn the bachelor's degree. About a fifth of the men and an eighth of the women expect to earn the master's degree. Six percent of the men and 12 percent of the women do not expect to obtain a degree. This was the case for 7 and 22 percent, respectively, of men and women at Maple Woods, 8 and 16 percent, respectively, at Longview, and 5 and 7 percent, respectively, at Penn Valley. The highest percentage of students aspiring for a doctor's degree was at Penn Valley.

TABLE 77

HIGHEST DEGREE SOUGHT BY PERCENT OF STUDENTS

Highest	Longview		Maple Woods		Penn Valley		Total	
Degree	Male	Female	Male	Female	Male	Female	Male	Female
Associate or Equivalent	27	29	26	23	22	36	24	32
Bachelor's	35	32	35	30	35	26	35	28
Master's	17	11	14	7	22	14	19	12
Doctorate	5	2	5	2	8	3	6	3
Other	3	3	4	5	4	5	4	4
None	8	16	7	22	5	7	6	12
No Response	5	7	9	11	5	9	6	9

Comparison of Present Occupation and Career Goals

An analysis was made between present occupations of students and long range career goals to determine what shifts are expected. For men and women at each college, percentages are shown in Table 78 of persons whose present job and long range career goal fall into each occupational category. It can be seen that small percentages of students (approximately) 2.2 percent) taking courses at the community college already have a job requiring a master's or higher degree; most are men. Six percent of the men attending have managerial or executive jobs. Forty-two percent of all men students and 31 percent of the women aspire to jobs requiring at least a master's degree.

The next greatest shift among men is from 36 percent presently employed in semi-skilled or general labor work to 1 percent who aspire to this type of work as a career goal and from 23 percent who aspire to managerial or executive type work compared to 6 percent who are presently employed in such jobs. Another shift is from 15 percent of men currently in sales or skilled work to less than one percent who aspire to such work as a career goal. Among women, the greatest shifts are from 42 percent currently employed in sales and skilled clerical work to 11 percent who expect a career in the business field and from 14 percent now in semi-professional or technical jobs to 28 percent who aspire to this line of work as a career goal. The closest relationship between present jobs and career goals was among men in semiprofessional or technical occupations. These men would appear to be upgrading job skills in semiprofessional and technical fields, while women are seeking entry into them. These data indicate that men with jobs in the sales and skilled clerical, semi-skilled, or general labor occupations expect upward job mobility to the managerial or executive and professional occupations in part through community college educational programs, while women in sales or skilled clerical fields of work expect to move into semiprofessional or technical or professional types of work.

TABLE 78

PRESENT OCCUPATION AND CAREER GOAL COMPARED BY PERCENT OF COLLEGE STUDENTS

	Longview		Maple Woods		Penn Valley		Total	
Occupation	Male	Female	Male	Female	Male	Female	Male	Female
Professional (Doctorate or advanced prof. degree)								
Present job	0.2	0.2	0.4	-	0.4	0.3	0.3	0.2
Career goal	11	5	12	4	16	7	13	6
Professional (Masters or equivalent)								
Present job	2	0.6	1	1	2	2	2	2
Career goal	30	25	25	22	29	26	29	25
Managerial or Executive								
Present job	6	2	5	2	5	1	6	1
Career goal	24	8	25	12	22	8	23	8
Semi-professional or technical								
Present job	13	6	12	8	17	18	15	14
Career goal	11	21	14	19	14	34	13	28
Public official or supervisor								
Present job	4	1	5	1	5	2	5	1
Career goal	5	4	4	2	4	2	4	3
Small business proprietor or farm owner								
Present job	1	1	1	0.6	1	0.5	1	1
Career goal	3	2	3	1	2	0.4	3	1
Sales or skilled clerical								
Present job	15	45	14	44	17	40	15	42
Career goal	1	14	0.4	20	0.6	7	0.5	11
Semi-skilled or general laborer								
Present job	38	5	43	7	31	6	36	6
Career goal	2	-	2	0.2	0.7	0.2	1	0.1
Housewife								
Present job	-	11	-	14	0.2	5	-	8
Career goal	-	3	-	2	-	0.5	-	1
Retired								
Present job	0.3	0.1	0.1	-	0.3	0.2	0.3	0.1
Career goal	0.5	0.3	0.8	0.2	0.6	0.1	0.6	0.2
Unemployed								
Present job	7	9	8	8	9	8	8	8
Career goal	0.2	0.2	0.2	0.3	0.6	0.1	0.4	0.2

Part II - Study of Selected Sampling of Students

Introduction

During late December, 1972 an attempt was made with the cooperation of local college officials to obtain information from a representative cross section of community college students on some different matters than had been the subject of the earlier inquiry during registration. Class groups of students unselected by program or ability were identified by officials at each College as being representative of the student body, and a questionnaire prepared for the purpose in cooperation with college officials was administered to each student attending these classes. The purpose was to get from a cross section rather than from a statistical random sample of the student body opinions about the college that would reflect typical or modal student thought.

Of the 691 community college students included in the study by picking class groups of unselected students, 45 percent were sophomores. The percentage of sophomores included in the fall registration was 33 percent. Men comprised 56 percent of the fall registration group of students, but 61 percent of the sample group were men. Percentages of students included in the fall registration group at Longview, Maple Woods, and Penn Valley Community Colleges were 32, 18, and 50 percent, respectively; however, the percentages of students from those colleges comprising the sample group were 29, 26, and 44 percent, respectively. Whereas, one-half of the students comprising the fall registration group were enrolled on a part-time basis, 42 percent of the students included in the cross-sectional sample were enrolled part-time. Thus, the group contacted through class selections had an over proportion of sophomores, men, and students from Maple Woods Community College. The group was underrepresented by part-time students and students from Penn Valley Community College.

This section of the report contains the results of responses from as typical a cross section of the MJCD students as was possible to select without the use of sophisticated statistical techniques which time available did not permit.

Characteristics of Respondents

Responses were received from 423 men and 268 women. There were 318 freshmen, 311 sophomores, 57 special students and 5 respondents who did not give their classification. Of these respondents, 202, 182, and 307, respectively, were at Longview, Maple Woods, and Penn Valley Community Colleges. Shown in Table 79 are the sex and college classification of students contacted. Observing the data, one can see that about the same percentage of freshmen, sophomores, and special students were contained in the groups of students contacted at Longview and Maple Woods Community Colleges. The percentage of freshmen contained in the Penn Valley student group was 40 percent compared to about one-half in the other college groups. The percentage of sophomores at Penn Valley was slightly over one-half compared to about 39 percent for the other colleges. A smaller percentage of Penn Valley students contacted were special students than was true for respondents on the other college campuses.

TABLE 79

NUMBER AND PERCENT OF RESPONDENTS BY SEX, COLLEGE AND COLLEGE CLASSIFICATION

College and Sex	No Response		Freshmen (318)		Sophomore (311)		Special (57)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Longview								
Male	1	1	68	49	57	41	12	9
Female	-	-	34	53	23	36	7	11
Total	1	0.5	102	50	80	40	19	9.4
Maple Woods								
Male	-	-	47	46	48	47	7	7
Female	2	2	46	58	19	24	13	16
Total	2	1	93	51	67	37	20	11
Penn Valley								
Male	-	-	67	37	102	56	14	8
Female	2	2	56	45	62	50	4	3
Total	2	1	123	40	164	53	18	6
Totals								
Male	1	0.2	182	43	207	49	33	8
Female	4	1	136	51	104	39	24	9
Total	5	0.7	318	46	311	45	57	8

Shown in Table 80 are the age categories of students contacted at each college by sex distribution. Under each college and opposite each age category are shown the percentages of men and women who responded to the study. For example, the reader can see that for the District 1 percent of the respondents were under age 18; 50 percent were 18-21; 21 percent were age 22-25 and so forth.

TABLE 80

PERCENT OF STUDENTS BY AGE, SEX AND COLLEGE

Age Category	Longview (N = 202)		Maple Woods (N = 182)		Penn Valley (N = 307)		Total (N = 691)		
	Male	Female	Male	Female	Male	Female	Male	Female	Total
Under 18	1	5	1	2	1	1	1	2	1
18-21	54	55	50	51	43	52	48	52	50
22-25	17	16	23	18	29	17	24	17	21
26-33	15	16	18	12	21	19	18	16	17
34-41	9	6	7	9	5	3	7	6	6
over 41	3	3	2	8	2	8	2	7	4

By observing the age distribution data, one can see that, in general, silimar percentages of students responding from each college were in the several age categories. Observation reveals that higher percentages of respondents at Longview Community College were age 21 and under than was the case at the other two colleges. Overall 51 percent of all respondents were in that age category. The largest percentage of respondents age 22-25 were at Penn Valley. The largest percentage of men over age 26 were at Penn Valley, but percentages of women over age 26 were similar for each college. Of all respondents 21 percent were age 22-25, and 27 percent were age 26 or over. The largest percentage of respondents age 34 and over was at Maple Woods.

Shown in Table 81 are the percentages of respondents according to academic standing in their high school graduating class as reported by them. Observing Table 81, one can see under each college the percentages of respondents ranking in the top, middle, and lower third of their respective graduating classes as reported by them. Similar percentages of respondents at each of the colleges were in the upper and middle third of their graduating classes by academic rank, however the largest percentage (55 percent) in the top third was at Longview compared to 41 and 38 percent, respectively, at Maple Woods and Penn Valley. Of all respondents 87 percent indicated their high school academic rank had been in the middle or upper third. Three percent had not graduated from high school, and 10 percent were in the bottom third of their high school class. Higher percentages of women than men at each college reported being in the middle and top thirds of their graduating classes.

TABLE 81

PERCENT OF COMMUNITY COLLEGE STUDENTS
BY HIGH SCHOOL ACADEMIC RANK
REPORTED BY THEM

Rank in Graduating Class	Longview			Maple Woods			Penn Valley			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Top third	49	67	55	32	51	41	33	44	38	38	52	44
Middle third	37	28	34	49	44	47	45	49	47	43	42	43
Lower third	10	2	7	16	4	10	17	4	12	15	3	10
Did not graduate	4	3	3	3	--	2	4	2	3	4	2	3

The distribution of respondents by college classification (freshmen, sophomore, or special) is shown in Table 82 according to high school academic class rank. One can observe, for example, that 36 and 52 percent of freshmen men and women, respectively, or 43 percent of both were in the

TABLE 82

REPORTED HIGH SCHOOL ACADEMIC RANK BY COLLEGE CLASS LEVEL

Rank in High School	Freshmen Male	Freshmen Female	Freshmen Total	Sophomore Male	Sophomore Female	Sophomore Total	Special Male	Special Female	Special Total
Top third	36	52	43	41	59	47	36	29	33
Middle third	46	44	45	41	36	39	48	54	51
Lower third	14	2	9	15	4	11	16	8	12
Did not graduate	4	1	3	3	1	3	--	8	4

Percent by College Class Level

top third of their high school class academically compared to 41 and 59 percent of sophomore men and women, respectively, or 47 percent of both. A higher percentage of freshmen and special students than sophomores had been in the middle and lower thirds.

Full-time or part-time enrollment status of respondents is shown in Table 83 by percentage for each college. Whereas, about half the respondents at Longview and Maple Woods were enrolled part-time, only a third of the respondents at Penn Valley were enrolled part-time.

TABLE 83

PERCENT OF STUDENTS ENROLLED PART OR FULL-TIME

College	Part-Time Male	Part-Time Female	Part-Time Total	Full-Time Male	Full-Time Female	Full-Time Total
Longview	48	53	50	52	47	50
Maple Woods	45	55	49	55	45	51
Penn Valley	30	39	33	70	61	67
Totals	39	47	42	61	53	58

Presented in Table 84 are data on the residential distribution for respondents at the time of high school graduation. For example, it can be seen that of the men respondents at Longview, 4 percent were not high school graduates, 64 percent were from the MJCD area, 15 percent were from high schools outside the area, and 16 percent were from outside Missouri. The rest of the data are to be read likewise. Observation reveals that a higher percentage of women than men, especially at Longview and Penn Valley, were from outside Missouri. The largest percentage of respondents from Missouri outside the MJCD area was at Maple Woods. About 56 percent of all respondents graduated from high school in the MJCD area, 18 percent were from Missouri outside the MJCD area, and 21 percent were from another state.

TABLE 84

LOCATION OF HIGH SCHOOL FROM WHICH STUDENTS GRADUATED BY PERCENT

College Attended	Not H.S. Grad.		MJC District		Outside MJC District		Outside Missouri		No Response	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Longview	4	5	64	56	15	13	16	25	--	2
Maple Woods	6	1	56	50	18	29	21	20	--	--
Penn Valley	4	5	56	53	20	15	19	27	--	--
Totals	5	4	59	53	18	19	18	24	--	.4

Student Plans for the Future

Students were asked if, at the present time, they planned to complete a degree or certificate program at the MJCD college where they were enrolled. These data were analyzed by both the college attended and the reported high school academic class rank. Data in Table 85 show, for example, that 62 and 44 percent, respectively, of men and women respondents at Longview, or 56 percent of both, plan to complete a degree or certificate. A fourth of the men and 36 percent of the women, or 28 percent of both, at Longview do not expect to earn a credential there. Thirteen and 20 percent of the men and women, respectively, or 15 percent of both did not know if they would earn a credential. Similar interpretations can be made for student respondents at the other colleges. The largest percentage expecting to complete a credential was at Penn Valley. A slightly higher percentage of all men and women respondents plan to complete a degree or certificate. Of all respondents, 62 percent expected to earn a credential, 23 did not, and 16 percent were uncertain.

TABLE 85

PERCENT OF STUDENTS PLANNING TO EARN A DEGREE

Plans for Degree	Longview			Maple Woods			Penn Valley			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Yes	62	44	56	50	54	57	66	70	67	63	59	62
No	25	36	28	22	31	26	18	17	17	21	26	23
Don't know	13	20	15	18	15	17	16	13	15	16	15	16

Data in Table 86 indicate the percent of men and women respondents from each high school class rank expecting to complete a degree or certificate. Of the men who were in the top third of their high school class, nearly two-thirds (65 percent) expect to complete a degree or certificate while over a fifth (22 percent) did not have this expectation, and 14 percent were uncertain. Of interest to MJCD should be the fact that over 7 of every 10 respondents from the lowest academic standing and those who had not graduated from high school expect to earn a credential. Only 64 and 56 percent of students from the top and middle thirds, respectively, by high school class rank expect to finish a degree or certificate program. The largest percentage not expecting to finish a program where they were enrolled had been in the top high school class rank, and the largest percentage who didn't know were in the middle third. These data reflect the expectations of the more academically able students to transfer into a bachelor's degree granting institution without completing requirements for a lower level credential. Over half (54 percent) of the part-time and two-thirds (67 percent) of the full-time students expect to complete a degree or certificate where they are enrolled. A higher percent of sophomores (73 percent) than freshmen (57 percent) expect to complete a degree or certificate where they are enrolled.

TABLE 86

PERCENT OF STUDENTS BY REPORTED HIGH SCHOOL ACADEMIC RANK AND PLAN FOR COMPLETING A DEGREE

High School Academic Rank	Yes			No			Don't Know		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Top third	65	63	64	22	28	25	14	9	11
Middle third	57	53	56	24	22	23	18	25	21
Lower third	71	78	72	13	11	13	16	11	15
Did not graduate	87	40	75	7	60	20	6	--	5

Respondents were asked what they were most likely to do after completing their educational program at the MJCD. These data were analyzed by college and are presented in Table 87. Under each college and opposite each plan are shown the percents of men, women, and both relative to what they expect to do after leaving the MJCD College. For example, one can see that of the men at Longview, 67 percent expect to transfer for further education at a four year institution, 4 percent expect to enter a trade or technical school, 1 percent expect to enter military service, and 14 percent expect to work full-time for someone other than themselves. Other data are to be interpreted likewise. The largest percentage (71 percent) expecting transfer to a four year institution was at Penn Valley, and the smallest percentage (48 percent) was at Maple Woods. Maple Woods had the largest percentage (26 percent) who expect to work full-time; they

TABLE 87

PERCENT OF COLLEGE STUDENTS BY FUTURE PLAN

Future Plan	Longview			Maple Woods			Penn Valley			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Transfer to a four-year college or university	67	58	64	57	36	48	80	56	71	70	51	63
Enter a trade or a technical school, institute, or college	4	--	2	3	1	2	4	6	5	4	3	3
Enter military service	1	--	0.5	2	--	1	1	--	0.6	1	--	1
Work on a full-time job for someone else	14	22	16	20	34	26	7	22	13	12	25	17
Become a housewife full-time	--	2	0.5	1	5	3	--	2	1	0.2	3	1
Travel & see some things	1	--	1	4	3	3	--	2	1	1	2	2
Run my own business	3	--	2	4	--	2	--	1	0.3	2	0.4	1
I do not plan to complete an educational program through the MJCD	3	9	5	5	11	8	3	6	4	3	8	5
Other	7	9	7	5	10	7	5	5	5	5	7	6

also had the highest percentage who did not plan to complete an educational program in a MJCD college.

While a higher percentage of all men than women respondents expect transfer to a four-year college or university, a higher percentage of women than men expect to work. Of all respondents, 63 percent expect to transfer for further work in a four-year institution. (This relatively high percentage probably reflects the over-proportion of sophomore students in the group contacted.) Seventeen percent expect to work, and the others were divided among several other plans. The largest percentage of respondents expecting to work was at Maple Woods as was the lowest percentage expecting to transfer.

Student plans were analyzed according to reported high school academic class rank, and these data appear in Table 88. Under each class rank are shown the percentages of men, women, or both, distributed according to future expectations after MJCD College attendance. Observing the data one can determine that higher percentages of men than women expect to

TABLE 88

PERCENT OF STUDENTS BY FUTURE PLAN AND REPORTED HIGH SCHOOL ACADEMIC RANK

Future Plan	Top Third			Middle Third			Lower Third		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Transfer to a four-year college or university	75	54	65	66	46	58	69	67	69
Enter a trade or a technical school, institute, or college	5	3	4	3	3	3	3	--	3
Enter military service	1	--	0.3	2	--	1	--	--	--
Work on a full-time job for someone else	11	19	15	14	32	21	13	33	15
Become a housewife full time	--	1	0.7	1	4	2	--	--	--
Travel and see some things	1	1	1	1	3	2	3	--	3
Run my own business	1	--	0.3	2	1	2	5	--	4
I do not plan to complete an educational program through the MJCD	2	10	6	5	7	6	--	--	--
Other	4	11	7	5	4	5	6	--	6

enter a four year college. Larger percentages of women than men in each class rank expect to work. The largest percentage (21 percent) of all respondents expecting to work was in the middle third as was the smallest percentage expecting to transfer for further education. Of interest to the MJCD should be the large proportion of college students from the lowest high school academic rank who expect to transfer after completing a program where they are currently enrolled.

Factors Affecting Enrollments

Respondents were asked whether they would still enroll in MJCD if they were making the choice over again. Responses were analyzed by college and by reported high school academic rank. Data for the three colleges are shown in Table 89. Under each college name are shown the percentages of students distributed according to responses about whether they would enroll again if doing it over. Responses were similar for students at each of the colleges where nearly 9 of every 10 indicated they would enroll if doing it over again. Of all students, 88 percent responded affirmatively, 6 percent didn't know, and 6 percent responded negatively.

TABLE 89

PERCENT OF STUDENTS WHO WOULD ENROLL AGAIN

Whether Students Would Enroll	Longview		Maple Woods		Penn Valley		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Total
Yes	91	86	88	88	86	89	88	88	88
No	5	9	5	6	6	4	5	6	6
Don't know	3	5	7	6	8	7	6	6	6
No response	1	--	--	--	--	--	0.2	--	0.1

Data are shown in Table 90 to indicate how students who had been in each of the different high school academic rank levels responded. About the same percent of men from each class rank would enroll again. However, a lower percent of women from the middle-third compared to those in the top or bottom thirds would enroll again. A higher percentage of women than men from the middle third either were uncertain or wouldn't enroll again than was the case for women ranking differently.

TABLE 90

PERCENT OF STUDENTS WHO WOULD ENROLL AGAIN AT MJCD BY REPORTED HIGH SCHOOL ACADEMIC RANK

Academic Rank in High School	Yes			No			Don't Know		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Top	88	93	90	7	5	6	5	2	4
Middle	87	82	85	5	8	6	7	10	8
Lower	90	89	90	2	--	1	8	11	8

Students were asked which reason was most important as to why they enrolled at a MJCD college. Percents are shown in Table 91 for each college by sex distributed according to reason for enrolling. Although low cost was given as the reason of most importance by respondents from each college and 40 percent of all respondents; the largest percentage citing this reason was found at Penn Valley College. The largest percentages indicating convenience of location were at Longview and Maple Woods Community Colleges. Convenient location was cited by higher percentages of women than men at each college while low cost was cited by higher percentages of men than women at each campus. Nearly a fourth of all students (24 percent) cited convenience as a reason. Sixteen percent, including nearly a fourth of the women at Penn Valley indicated they enrolled because courses they wanted were offered. Only 4 percent, with

TABLE 91

PERCENT OF STUDENTS BY REASON FOR ENROLLING

Reason	Longview Male	Longview Female	Maple Woods Male	Maple Woods Female	Penn Valley Male	Penn Valley Female	Total Male	Total Female	Total
Low cost	42	34	37	23	48	40	43	34	40
Conveniently Located	27	37	25	48	13	14	21	29	24
Courses I wanted were offered	13	5	18	14	17	24	16	16	16
Denied admission to another school of my choice	1	--	3	1	4	2	3	1	2
I had difficulty in another college	2	--	--	1	4	2	2	1	2
Heard MJCD offers a good education	7	6	4	1	7	8	6	6	6
Advice of others	3	3	5	5	1	4	3	4	3
Other	3	14	8	8	7	6	6	8	7

most of them at Penn Valley, indicated they had either been denied admission to another school of their choice or that they had experienced difficulty in another college. Six percent, with the largest proportion at Penn Valley and the smallest proportion at Maple Woods, indicated they enrolled because they heard MJCD offers a good education. Another 7 percent enrolled for reasons other than those mentioned.

Reasons for enrolling were analyzed by reported high school class rank. These data are shown in Table 92. Observing the data, one can determine that low cost was the reason cited by the largest percentage, regardless of academic rank with the smallest percentage citing it, from the middle academic rank. Convenience of location was cited most by respondents from the middle rank as was the offering of courses wanted. The largest percentage of students who had been denied admission or had difficulty in another college was in the bottom third of their high school class.

The reason cited by the largest percentage of special students was the presence of courses they wanted, but low cost was cited as the reason by the largest percentage of freshmen and sophomores. However, convenience of location was cited by 27 and 30 percent of the freshmen and special students, respectively, compared to 19 percent of the sophomores. When reasons cited by part-time and full-time students were analyzed, it was found that convenience was the predominent reason among part-time students (34 percent). Low cost was the predominent reason among full-time students.

TABLE 92

PERCENT OF COLLEGE STUDENTS BY REPORTED HIGH SCHOOL ACADEMIC RANK AND REASON FOR ENROLLING

Reason for Enrolling	Top Third			Middle Third			Lower Third		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Low cost	49	35	43	37	34	36	45	22	42
Conveniently located	19	29	24	23	28	25	19	22	20
Courses I wanted were offered	14	15	14	18	17	18	16	11	15
Denied admission to another school of my choice	2	1	2	2	2	2	8	--	7
I had difficulty in another college	3	2	3	2	--	1	2	11	3
Heard MJCD offers a good education	4	5	5	8	5	7	3	22	6
Advice of others	1	3	2	4	6	5	3	--	3
Other	7	9	8	5	7	6	3	11	4

Student Perceptions About Factors Related to Enrollments

Image held in the community about a college is an important factor in whether students attend. Image consists of how people think about many things regarding the college. Among these things are the kinds of students who go to a college. Image and reputation are inexorably related. In this study students were asked their perceptions about what kind of person enrolls at MJCD. While students constitute only one group in the community, their views are valuable due to the relationships they have in the community with many other groups, including their own peers.

Shown in Table 93 for each college are the percentages of men and women students according to kinds of persons they think enroll. Respondents were asked to indicate a single descriptive phrase which most accurately described students who enroll. Over half of all students (56 percent), with the largest percentages of men and women at Penn Valley, indicated that all kinds of persons enroll: rich-poor, smart-dumb. A fifth of all students, with the largest percentages at Longview, indicated persons enrolled who want small classes and a good education. The next largest percentage of all students (12 percent), with the largest percentage at Penn Valley, indicated they thought persons enrolled who can't afford to go elsewhere. Three percent believed that persons who enroll do so because they can't get the type of educational program they want somewhere else. It is worth noting that only about 3 percent indicated that students enrolling at a MJCD college are either students with below average high school grades, those who "flunk out" elsewhere, or those who can't get into another

TABLE 93

KINDS OF STUDENTS THOUGHT TO ENROLL AT MJCD BY PERCENT

Kind of Persons	Longview		Maple Woods		Penn Valley		Total		
Thought to Enroll	Male	Female	Male	Female	Male	Female	Male	Female	Total
Persons who can't afford to go somewhere else	12	12	12	5	14	12	13	10	12
Students with below average high school grades	1	--	4	1	5	1	3	1	2
Persons who can't get the type of educational program they want somewhere else	4	2	3	5	2	2	3	3	3
People who "flunk out" elsewhere or can't get into another college	2	--	--	--	--	1	1	0.4	0.6
Persons who want small classes and a good education	21	31	21	26	11	22	17	25	20
All kinds: rich-poor; smart-dumb	51	52	52	57	60	59	55	57	56
Other: (Write in)	6	3	6	3	7	3	6	3	5
No response	3	--	2	3	1	--	2	1	1

college. Most of the students responding this way were located at Penn Valley Community College. Five percent believed other kinds of persons enroll, and 1 percent did not respond.

Data were analyzed by high school academic class rank for respondents of all colleges to determine what differences, if any, might exist among students with different academic backgrounds. Results are presented in Table 94. Observing Table 94 the reader will see the percentages of men and women under each reported class rank according to the different perceptions held about what kind of person enrolls in a MJCD college.

A larger percentage of students in the top third (60 percent) believed that, on the average, all kinds of persons enroll compared to those in the middle third (53 percent) and those in the bottom third (49 percent). A larger percentage of students in the middle and bottom third (13 percent) than those in the top third (10 percent) indicated persons enroll who can't afford to go elsewhere. The largest percentage who believed persons enrolling were those who want small classes and a good education were in the middle third (22 percent compared to 18 and 19 percentages in the lowest and top thirds, respectively).

TABLE 94

COLLEGE STUDENTS' PERCEPTION OF TYPES OF PERSONS ENROLLING AT MJCD COLLEGES ACCORDING TO REPORTED HIGH SCHOOL ACADEMIC RANK

Kind of Persons Thought to Enroll at an MJCD College	Percent by High School Academic Rank									All Students
	Top Third			Middle Third			Lower Third			
	M	F	T	M	F	T	M	F	T	
Persons who can't afford to go somewhere else	14	6	10	13	13	13	13	11	13	12
Students with below average high school grades	1	--	1	2	1	2	13	11	13	2
Persons who can't get the type of educational program they want somewhere else	2	3	3	4	4	4	3	--	3	3
People who "flunk out" elsewhere or can't get into another college	2	1	1	--	--	--	--	--	--	0.6
Persons who want small classes and a good education	12	27	19	20	24	22	19	11	18	20
All kinds: rich-poor; smart-dumb	60	60	60	52	55	53	47	67	49	56
Other	6	3	4	8	3	6	5	--	4	5

College students were asked how important they felt each of several reasons were as to why more of their high school classmates and friends did not enroll in MJCD. Each respondent was asked to indicate whether they felt each of several possible reasons was of no importance, some importance, or much importance. These responses were analyzed by college and by high school academic rank of respondents. Data are presented in Table 95 by college in which respondents were enrolled. Interpretation of Table 95 is as follows: 51 percent of the men at Longview indicated lack of money was of no importance, 25 percent felt it was of some importance, and 7 percent believed it was of much importance. Likewise, 53, 20, and 8 percent, respectively, of the women at Longview thought lack of money was of no, some, and much importance. The rest of Table 95 is to be read in similar fashion.

TABLE 95

PERCENT OF STUDENTS ACCORDING TO IMPORTANCE OF REASONS
WHY OTHERS DID NOT ATTEND AN MJCD COLLEGE

Reason for Not Attending	Longview						Maple Woods						Penn Valley					
	None		Some		Much		None		Some		Much		None		Some		Much	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Lack of money	51	53	25	20	7	8	46	51	32	19	6	18	49	33	26	31	12	10
Wanted better college	15	9	49	42	20	28	10	16	51	41	25	28	19	13	44	38	24	23
To live away from home	24	14	29	28	30	41	25	23	30	24	29	38	22	21	38	22	26	33
Students are unfriendly	71	75	9	6	1	2	69	75	10	9	6	--	76	64	7	9	2	1
No information about MJCD	39	42	33	28	10	9	43	54	33	21	11	9	42	29	32	32	10	12
Advice of high school counselors and/or teachers	29	34	39	27	14	19	32	24	42	45	9	15	33	24	39	31	11	18
Program wanted not offered at MJCD	21	11	38	38	25	34	17	14	38	36	31	34	22	18	43	37	19	19
Lack of transportation	58	48	19	27	6	6	51	51	25	25	10	6	58	43	21	20	4	10

Observing the data, one can see that the largest percentage of respondents at all three colleges believed lack of money was of no importance with the smallest percentage at Penn Valley. The largest percentage indicating lack of money was of some importance was at the Penn Valley College. The largest percentage of respondents at each college felt that the desire for a better college was of some importance to other persons (classmates and friends) as a reason for their non-enrollment at MJCD. A higher percentage of students at Longview and Maple Woods Community Colleges than at Penn Valley Community College felt that this reason was of some importance. The largest percentage of students at Penn Valley felt that the desire of students to live away from home was of some importance, but the largest percentage of students from Longview and Maple Woods thought this reason was of much importance. The largest percentage (about 72 percent) of students at all colleges felt that student unfriendliness was of no importance. While the largest percentage of students at each college thought lack of information about MJCD was of no importance, nearly a third of the respondents from Longview and Penn Valley, and 28 percent of those from Maple Woods, felt this reason had some importance. About a tenth of the students at each campus believed lack of information was of much importance.

The largest percentage of men and women at each college believed that advice of high school counselors and/or teachers was of some importance. Higher percentages at Longview and Penn Valley believed this than at Maple Woods. The largest percentage of students at each campus felt the absence of programs wanted was of some importance. Higher percentages (about 30 percent) at Longview and Maple Woods than at Penn Valley (18 percent) believed this reason was of much importance. Over half the respondents at each college believed lack of transportation was of no importance. Over a fifth, with the largest percentage being at Maple Woods, believed that lack of transportation was of some importance. The largest percentage of respondents citing lack of transportation as a reason of much importance for non-attendance was at Maple Woods.

Perceptions about the importance of various reasons for non-attendance at an MJCD college analyzed by reported high school academic rank are shown by percent in Table 96. Opposite each reason are shown the percentages for men and women by high school academic rank. Lack of money and programs wanted were thought to be of some importance by larger percentages of respondents in the middle third than those in the other two academic rank categories. Advice of high school counselors and/or teachers was felt to be of some importance by larger percentages of respondents in the top third, but this reason was believed to be of much importance by larger percentages of respondents in the middle and bottom thirds. Lack of information was cited as a reason having some or much importance by larger percentages of respondents in the top than other thirds. While the largest percentage citing the desire to live away from home as having some or much importance were in the top third by class rank, a substantial percentage with the other academic ranks also cited this reason as of much or some importance. The largest percentage indicating the desire for a better college as having some or much importance were in the middle rank. That students are unfriendly

TABLE 96

IMPORTANCE OF REASONS FOR NON-ATTENDANCE BY REPORTED HIGH SCHOOL ACADEMIC RANK AND SEX OF COLLEGE STUDENTS BY PERCENT OF RESPONSE*

Reason for Non-Attendance	Top Third						Middle Third						Lower Third					
	None		Some		Much		None		Some		Much		None		Some		Much	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Lack of money	57	19	21	24	9	8	45	38	31	26	10	16	47	22	29	11	10	33
Wanted better college	14	15	48	40	24	24	13	9	50	41	22	27	19	22	42	33	26	11
To live away from home	20	16	34	26	31	41	25	22	32	24	26	32	22	33	39	11	27	11
Students are unfriendly	74	71	8	9	3	1	71	70	9	8	3	--	76	44	8	11	--	--
No information about MJCD	43	37	33	32	11	11	41	39	34	25	9	11	40	55	34	--	11	--
Advice of high school counselors and/or teachers	30	23	46	41	9	16	32	29	37	28	13	19	32	22	35	11	14	22
Program wanted not offered at MJCD	20	16	41	37	25	28	20	14	45	39	20	24	19	11	29	22	37	22
Lack of transportation	60	47	20	28	5	6	53	48	24	17	5	10	58	11	18	22	10	22

---

*Differences between row totals of males and females under each rank category and 100 is due to non-response.

was cited as a reason having no importance by a large majority of respondents, with the largest percentage being in the top academic third of their high school class. Lack of transportation was cited by the largest percentage of top rank students as having no importance. The largest percentage indicating this factor was of much importance came from the bottom third group although the largest percent indicating this reason was of some importance came from the top third.

Data summarizing these findings for all respondents are presented in Table 97. Opposite each reason are given percents of all respondents by the degree of importance ascribed to each reason why more classmates and friends did not enroll at MJCD. Desire to live away from home, desire for a program not offered, and desire to attend a better college, in that order, were reasons judged of most importance by the largest percentages of students.

TABLE 97

IMPORTANCE OF REASONS FOR NON-ATTENDANCE GIVEN BY ALL RESPONDENTS

Reason	None	Some	Much	No Response
Lack of money	47	26	10	17
Wanted better college	15	44	24	17
Desire to live away from home	22	30	31	17
Students are unfriendly	72	8	2	18
No information about MJCD	41	31	10	18
Advice of high school counselors and/or teachers	30	37	14	19
Program wanted not offered	18	39	25	18
Lack of transportation	52	22	7	19

Desire for a better college, desire for a program not offered, and advice of high school teachers and counselors in that order were judged as having some importance by the largest percentages of respondents. Unfriendly students, lack of transportation and lack of money in that order were judged as having no importance by the largest percentages of respondents.

Evaluation of Help Received From the College

Students were asked how well they thought the course of study they were taking at college was preparing them for what they planned to do after their enrollment in an MJCD college is finished. Results analyzed by college are shown in Table 98.

TABLE 98

PERCENT BY COLLEGE ACCORDING TO HOW WELL STUDENTS BELIEVE COLLEGE IS PREPARING THEM

Evaluation of Preparation	Longview			Maple Woods			Penn Valley			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Not very well	4	5	4	3	--	2	5	2	4	4	2	3
Fair, but all could be better	12	12	12	13	16	14	18	14	17	15	15	15
Very good in most ways, but could be better in other ways	38	20	32	42	29	36	38	35	37	39	39	35
It is giving me just what I need	41	61	48	40	55	47	35	44	38	38	51	43
No response	6	2	4	2	--	1	4	5	4	4	3	3

Under each college are shown the percentages of men, women, and both who gave each of the evaluative responses. In general, higher percentages of women than men felt the college was giving them just what was needed, and higher percentages of men than women felt their preparation was very good in most ways but could be better in other ways. Evaluations among the colleges were similar; however, a slightly higher percentage of Penn Valley than other respondents indicated they were not being prepared very well or that their preparation was fair and all of it could be better. A smaller percentage of Penn Valley than other college respondents felt their preparation was just what they needed.

Overall, 43 percent believed their preparation was just what they needed, and 35 percent felt preparation was very good in most ways but could be better in other ways. Only 3 percent didn't think they were being prepared very well, and 15 percent thought their preparation was fair, but all could be better.

Results were analyzed according to reported high school academic rank to determine if evaluations were different among students with different levels of academic background. Shown in Table 99 under each of three academic rankings are percents of respondents giving each of the several evaluations. Observing the data, one can see that higher percentages of students in the middle third evaluated their preparation lowest. However, the largest percentage indicating their preparation was just what they needed were also from the middle third. The largest percentage believing the preparation was very good in most ways but could be better in other ways was in the lowest third, and the lowest percentage feeling this way was from the middle third.

An analysis of evaluations by whether respondents intended to earn a degree or certificate revealed that higher percentages who did not expect to obtain a credential and those who were uncertain evaluated their preparation as being less effective than respondents who did expect to earn a credential. Part and full-time students evaluated their preparation about the same. Evaluations by freshmen and sophomores were similar.

TABLE 99

HOW WELL STUDENTS BELIEVE COLLEGE IS PREPARING THEM

How Well College is Preparing	Percent by Reported High School Rank											
	Top Third			Middle Third			Lower Third			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T
Not very well	5	1	3	3	4	3	5	--	4	4	2	3
Fair, but all could be better	9	14	12	18	14	17	15	11	14	15	15	15
Very good in most ways, but could be better in other ways	45	31	39	33	29	31	42	33	41	39	30	35
It is giving me just what I need	36	53	44	41	51	45	35	44	37	38	51	43

Students were asked the extent to which they had used selected services and programs and to indicate how much help they had received from each one they had used. The results analyzed by college are presented in Table 100. Opposite each service and program and under the name of each college are shown the percentages who had used it and the amount of help received. For example, the reader can see that 75 and 61 percentages of the men and women students, respectively, at Longview, or 70 percent of both, had used counseling services. Then it can be seen that of all men enrolled at Longview, 14, 52, and 14 percentages, respectively, had received from counseling services lots, some, and no help, respectively. Eleven, 44, and 17 percentages, respectively, of girls had received lots, some, and no help from counseling services. The remaining data are to be read likewise.

Viewing the data, one can see that a smaller percentage of respondents at Maple Woods had used counseling services than at the other colleges, but a higher percentage of the students at Maple Woods than at other colleges who had used the services felt they had received "lots" of help. A smaller percentage of respondents at Penn Valley than the other colleges had used career information services, and a higher percentage at Penn Valley than at the other colleges had received no help from them. The largest percentages of students using information about other colleges, financial assistance, health services, and library materials were at Penn Valley. The largest percentages using student activities and academic advisement were

TABLE 100

PERCENT OF STUDENTS BY USE AND AMOUNT OF HELP RECEIVED FROM SELECTED COLLEGE PROGRAMS AND SERVICES

Program & Service	Longview			Maple Woods			Penn Valley			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Counseling services												
Used: Yes	75	61	70	72	54	64	72	73	72	73	64	69
Amount of help:												
Lots	14*	11	13	25	14	20	13	14	14	16	13	15
Some	52*	44	49	45	39	42	55	54	55	52	47	50
None	14*	17	15	9	18	13	13	16	14	12	17	14
Career information												
Used: Yes	20	33	24	29	34	31	15	25	19	20	29	24
Amount of help:												
Lots	2	8	4	6	5	5	2	10	6	3	8	5
Some	17	22	19	25	30	27	13	14	13	17	21	19
None	30	23	28	26	21	24	38	31	35	33	26	30
Information about other colleges												
Used: Yes	24	14	21	32	16	25	35	25	31	31	20	27
Amount of help:												
Lots	3	--	2	8	1	5	3	6	4	4	3	4
Some	20	11	17	26	16	22	31	17	25	26	15	22
None	28	30	28	26	35	30	28	28	28	25	30	29
Financial assistance												
Used: Yes	18	6	14	24	16	21	21	24	22	21	18	20
Amount of help:												
Lots	13	5	10	13	14	13	8	12	9	11	11	11
Some	4	2	3	12	1	7	10	10	10	9	6	8
None	32	30	31	31	39	35	37	30	34	34	32	33
Health services												
Used: Yes	5	6	5	3	--	2	5	7	6	5	5	5
Amount of help:												
Lots	--	--	--	2	--	1	--	3	1	.5	1	1
Some	3	6	4	3	1	2	6	3	5	4	3	4
None	37	31	35	44	44	44	44	38	42	42	38	40
Student activities												
Used: Yes	20	23	22	33	18	26	20	14	18	23	18	21
Amount of help:												
Lots	5	3	4	5	4	4	6	3	5	5	3	5
Some	14	20	16	29	13	22	13	13	13	17	15	16
None	25	22	24	29	35	32	36	31	34	31	30	31

TABLE 100

PERCENT OF STUDENTS BY USE AND AMOUNT OF HELP RECEIVED FROM SELECTED COLLEGE PROGRAMS AND SERVICES
(Continued)

Program & Service	Longview			Maple Woods			Penn Valley			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Library materials related to class work												
Used: Yes	64	67	65	67	74	70	75	75	75	69	73	71
Amount of help:												
Lots	17	25	20	25	34	29	39	39	39	28	34	31
Some	46	42	45	43	36	40	36	39	37	41	39	40
None	12	6	10	8	8	8	8	6	7	9	7	8
Orientation to college												
Used: Yes	28	31	29	22	18	20	27	27	27	26	25	25
Amount of help:												
Lots	7	11	8	6	3	4	8	3	6	7	5	6
Some	20	17	19	13	16	14	17	22	20	17	19	18
None	22	22	22	38	31	35	34	30	32	31	28	30
Academic advisement on courses to take												
Used: Yes	62	47	57	60	59	59	56	57	57	59	55	57
Amount of help:												
Lots	20	11	17	22	23	22	13	16	14	17	17	17
Some	38	31	36	36	33	35	38	39	38	37	35	36
None	17	19	17	12	13	12	20	17	19	17	16	16

---

*Differences between the sums of triads and 100 represent non-responses for percents are based upon total number of respondents instead of only those who responded to the item.

at Maple Woods, and the largest percentage having used college orientation services was at Longview. Most help from financial services, student activities, career information, and academic advisement was reported received by students at Maple Woods. Most help from health services, library materials related to class work, and information about other colleges was reported received by students at Penn Valley. Most help was reported received from college orientation services at Longview.

Among all students, programs and services in order by frequency of use were: Library materials (71 percent), counseling services (69 percent), academic advisement (57 percent), information about other colleges (27 percent), college orientation (25 percent), career information (24 percent), student activities (21 percent), financial assistance (20 percent), and health services (5 percent). Percents of all students receiving some or lots of help from these programs and services were 71, 65, 53, 26, 24, 24, 21, 19, and 5 percent, respectively.

Data on student use of programs and services were analyzed by reported high school academic rank for all students responding. Programs and services used by the largest percentage of students in the top third by high school class rank were financial assistance (22 percent) and library materials (71 percent). Programs and services used most by the middle ranking students were career information (26 percent), student activities (24 percent), and college orientation (27 percent). Lowest third ranking students had the highest percent utilization of counseling services (76 percent), information about other colleges (38 percent), and academic advisement on courses to take (61 percent). Both middle and lower third ranking students used health services (7 percent) more than students in the top third (3 percent).

The largest percentage of students reported in the top third of their high school class academically who received some or lots of help got it from financial assistance. The largest percentage of students who had been in the bottom third of their high school class and received some or lots of help got it from counseling services and information about other colleges. With the exception of academic advisement, where the same percentages of students in the top and lower rankings received lots or some help, students in the middle class rank received the most help from all other programs and services.

Additional Programs of Interest

Students were asked if there were other fields of study not offered at MJCD which can be studied immediately after high school graduation in which they would have been more interested than in the program in which they were enrolled. Percentages of response by college are shown in Table 101. The largest percentages of men and women indicating interest in another program not offered (23 percent) were at Maple Woods, and the next largest percentages were at Longview. Among all students, 21 percent of the men and 17 percent of the women, or 19 percent of both, indicated there were programs not offered in which they would have interest. When responses were analyzed according to reported high school rank, it was found that 22 and 14 percentages of men and women, respectively, in the top third, or 18 percent of both, indicated programs of interest which were not offered. Twenty-three and 20 percentages of men and women, respectively, or 22 percent of both,

TABLE 101

PERCENT OF STUDENTS BY INTEREST IN A FIELD OF STUDY NOT OFFERED

Extent of Interest	Longview		Maple Woods		Penn Valley		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Total
Yes	22	17	23	23	20	13	21	17	19
No	76	81	72	76	78	84	76	81	78
No response	2	2	5	1	2	3	3	2	3

having other program interests were in the middle third. Of those in the lowest third, 16 and 23 percentages of men and women, respectively, or 18 percent of both, had other program interests. A higher percentage of freshmen (22 percent) than sophomores (17 percent) indicated other interests. A slightly higher percentage of persons not expecting to complete a degree (20 percent) than others (17 percent) had other program interests. Fifteen percent of part-time students compared to 23 percent of full-time students indicated other program interests.

Although students with other program interests were asked to write the name of the field of study in which they were interested, only five did so. Three men at Longview were interested in nursing, and one man at each of the other two campuses were interested in metallurgical and metals technology.

Sources of Information About MJCD

Respondents were asked to indicate the source from which they obtained most information about MJCD. Responses are shown in percent by college for men and women in Table 102. Under each college are the distributions of percentages by information source. Observing Table 102 one can see that

TABLE 102

PERCENT OF STUDENTS BY SOURCE OF INFORMATION ABOUT MJCD

Source of Information	Longview		Maple Woods		Penn Valley		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Total
High school teachers & guidance counselors	22	13	14	14	8	10	14	11	13
High school students	7	9	8	10	6	2	7	6	7
Friends or relatives	29	34	26	26	40	33	33	31	32
Written materials	20	27	34	37	23	34	25	33	28
Employer	7	3	3	4	6	9	6	6	6
Representatives of MJCD	6	12	8	4	9	5	8	6	7
Other	6	2	6	4	8	5	7	4	6
No response	2	--	1	1	1	2	1	1	1

BEST COPY AVAILABLE

over a fifth (22 percent) of the men at Longview had received their information from high school teachers or guidance counselors as did 13 percent of the women. Fourteen percent of the respondents at Maple Woods had received most information from that source, and about 9 percent of Penn Valley respondents had, likewise, received most information from that source. Information was received by the largest percentages of respondents from friends or relatives (32 percent) or from written materials (28 percent). Seven percent each had received most information from other high school students and from college representatives. Six percent each had received information from their employer or from other sources. The largest source of information for students at Penn Valley and Longview was word of mouth from friends and relatives; while,at Maple Woods the largest source of information was from written materials.

The largest percentage of respondents whose high school class rank was top or middle third got their information from friends and relatives, while the source for the largest percentage of students in the bottom third was from written materials. Whereas, 14 percent of students in the top and middle thirds had most information from high school teachers or counselors, only 8 percent of those in the lowest third had information from this source. A smaller percentage of lower third rank students than those in other ranks had received information from other high school students. Regardless of rank, about the same percent (12 percent) had received information from employers or college representatives. About the same percentage of freshmen and sophomores had received information from each of the sources.

The same percentages of full-time and part-time students had received information about the college from other high school students, college representatives, written materials and friends or relatives. However, it is significant to note that 12 percent of the part-time students had received most information from employers compared to 1 percent of full-time students. Also, 17 percent of full-time students had received most information from high school teachers or counselors compared to 7 percent of the part-time students.

UNIVERSITY OF CALIF.
LOS ANGELES

JAN 10 1975

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION